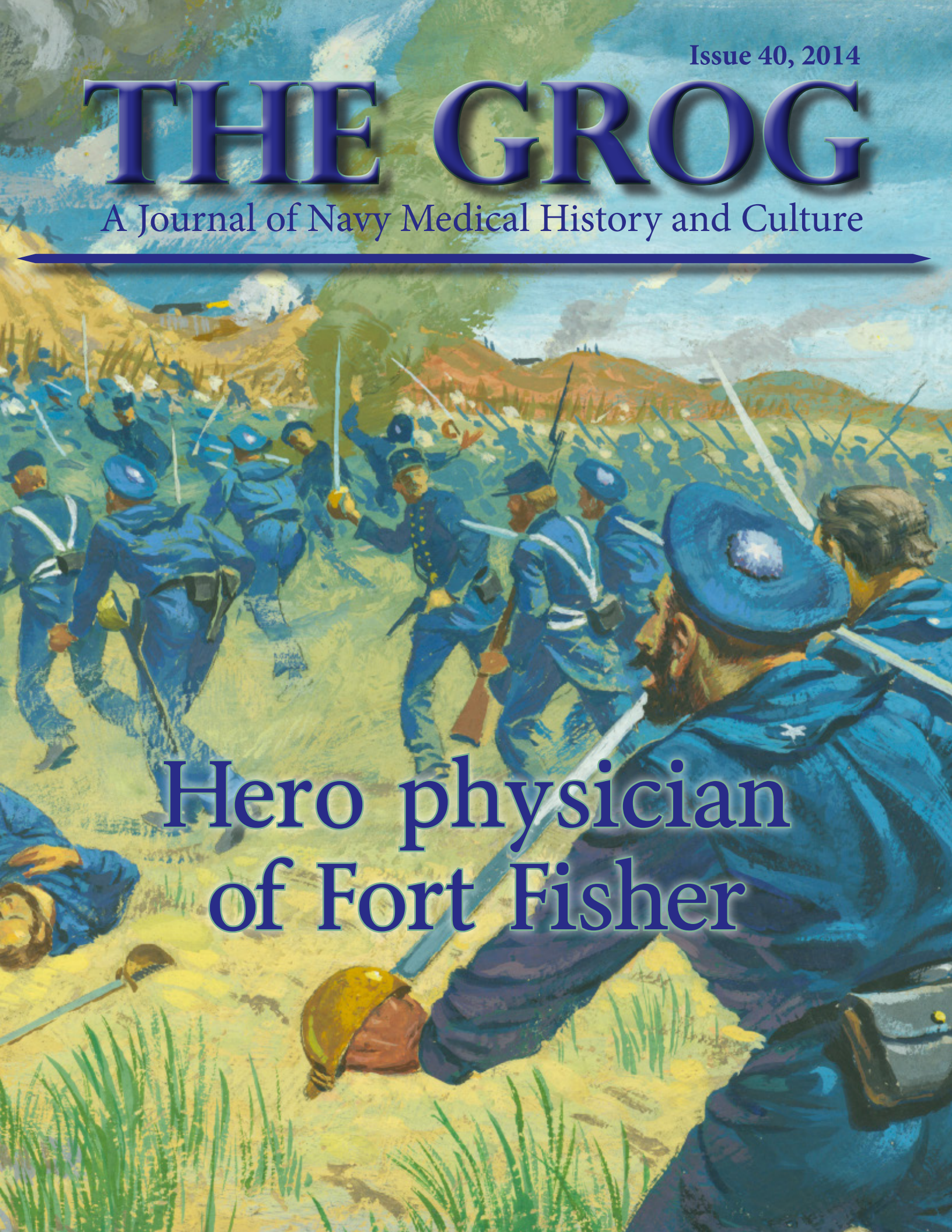
Issue 40, 2014

THE GROG

A Journal of Navy Medical History and Culture



Hero physician of Fort Fisher

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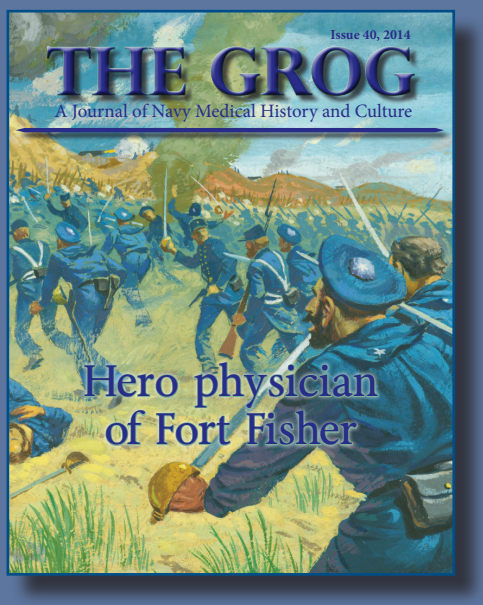

"Storming Fort Fisher, January 1865"
Artist unknown
Gouache on Paper
Courtesy of the Navy Art Gallery
80-179-A

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Introduction

Few moments are as lonely or frustrating as being the last person at an airport baggage carousel with the sudden realization that your luggage will not be making an appearance. As the next flight's cargo is announced by the seemingly taunting siren, you review the possible scenarios—Is my bag on the wrong plane? Has my luggage gone on to star in an episode TV's "Baggage Battles?" Was it something I said? In the end, you know you have just entered another dimension, a dimension of disappointment and long waits. Like it or not, you have just entered the "Lost and Found Zone."

In this edition of THE GROG—with the help of our illustrious authors—we present an assortment of original stories with that same "Lost and Found" theme, but without the disappointment, or that same anxiety-rich aftertaste.

In a "Case for Dr. Longshaw," we rediscover Navy Medicine's lost hero of the Second Battle of Fort Fisher and attempt to stoke the flames of his remembrance. We follow this with Cmdr. Leahey's story of Chief Navy nurse Sophia Kiel, one of the most highly decorated nurses in 1919, but largely an unknown figure to present-day historians. In the article "Remembering Naval Base Hospital No. 1," Mr. Lusby takes us on a sentimental journey to Navy Medicine's hospital on the Emerald Isle. Dr. Ibrahim Helmy's "An Accident in Northern Sinai" is the legendary NAMRU-3 zoologist's tale of finding hope despite a great loss. And finally, in "Finding a Needle in a Haystack," Cmdr. Green recounts an incredible mission to locate a missing aircraft with the aide of a Deep Submersible Vehicle. We bolster this literary line-up with the usual assortment of historical sidebars, trivia as well as a book review by our own Col. Ginn.

As always we hope you enjoy this tour on the high seas of Navy Medicine's past!

page 4...*Medical Hero at Fort Fisher*

page 14...*Navy Nurse and Recipient of the St. Anne Medal*

page 22...*Base Hospital No. 1 in Londonderry*

THE GROG

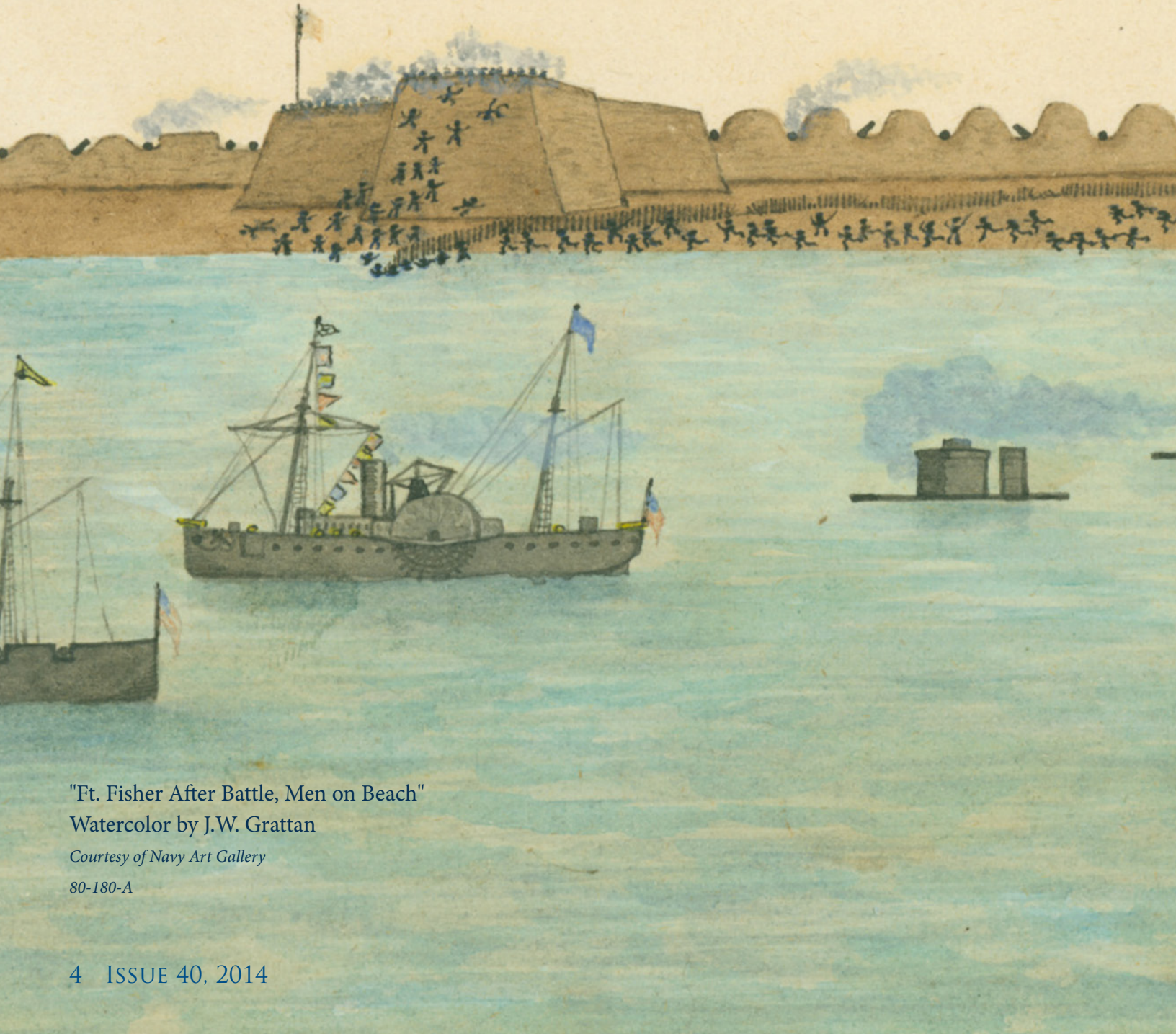
A JOURNAL OF NAVY MEDICAL HISTORY AND CULTURE

Features

Showcase

THE GROG is a free tri-annual publication of the Communications Directorate dedicated to the promotion and preservation of the history and culture of the Navy Medical Department. Articles and information published in THE GROG are historical and are not meant to reflect the present-day policy of the Navy Medical Department, U.S. Navy, and/or the Department of Defense.

A Case for Dr. Longshaw



"Ft. Fisher After Battle, Men on Beach"
Watercolor by J.W. Grattan
Courtesy of Navy Art Gallery
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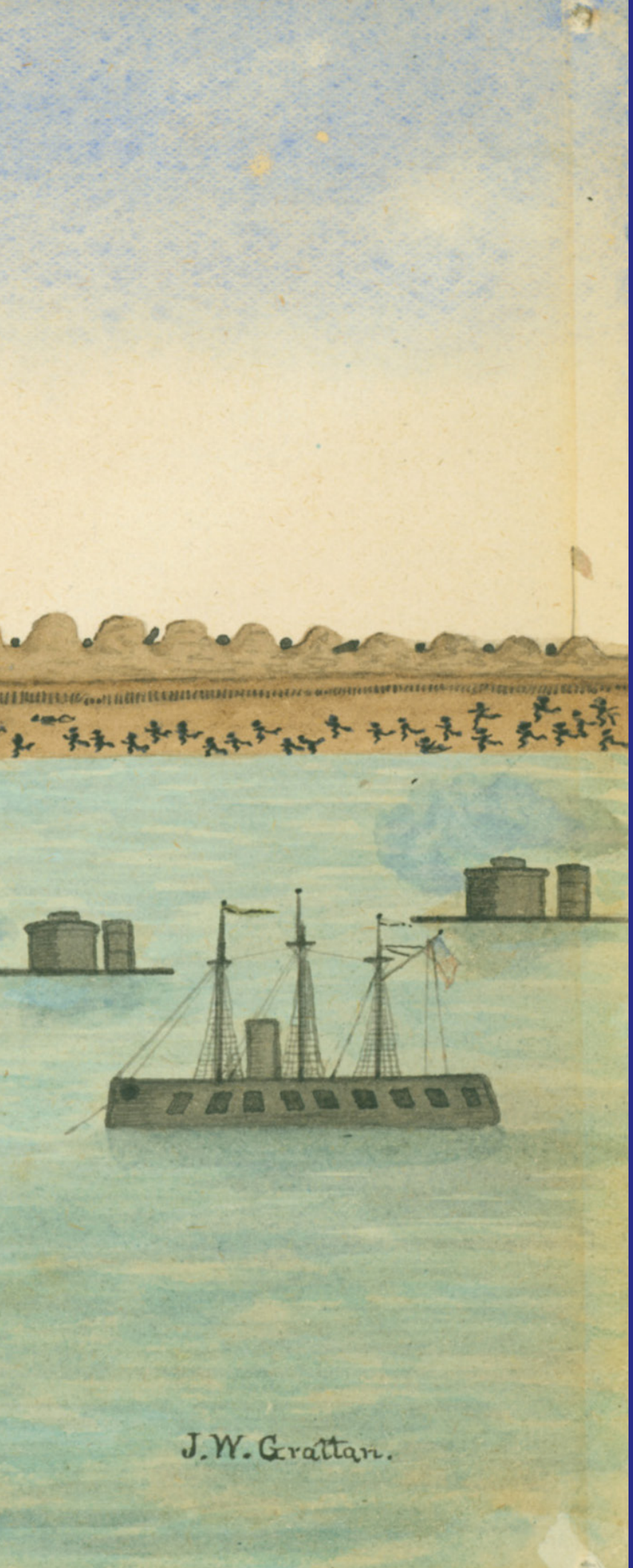


Revisiting Navy Medicine's Overlooked Hero of the Second Battle of Fort Fisher, January 1865

"Is it not within the power of the Navy to make the memory of him a living force to-day and for all time? It seems to be a duty the living owe themselves that his name shall be an inspiration forever."
~Medical Director James Gatewood, USN on Civil War hero Assistant Surgeon William Longshaw[1]

In the last year of the Civil War, U.S forces embarked on the largest amphibious assault ever before undertaken in world history. On January 13, 1865, some 70 U.S. warships with more than 600 guns stood offshore as 2,000 Sailors and Marines stormed the beaches of Fort Fisher on the way to topple the enemy's "impenetrable" defenses. Charging the 1,200 feet from shore to the entrenched enemy was a perilous mission and casualty rates would be significant.[2] Among those tending to the wounded at the risk of his own life was a 25-year-old Navy physician whose selflessness and bravery was noted by many, but those honorifics fell short of any formal commendation for what would be his ultimate sacrifice. As we approach the 150th anniversary of this Second Battle of Fort Fisher—an engagement that would cement the Confederacy's fate—there is no more appropriate time than now to remember that unsung medical hero, Assistant Surgeon William Longshaw, Jr.

1. Gatewood, James. "William Longshaw, Jr., Assistant Surgeon, U.S. Navy (1839-1865); A Biographical Sketch." *Naval Medical Bulletin*, 1913.

2. Naval Brigade at Fort Fisher suffered a 17 percent casualty rate in the attack (Gatewood).

On January 15, 1865, Dr. William Longshaw was among the first officers to storm the beaches of Fort Fisher as part of what Admiral David Dixon Porter[3] colloquially termed the "boarding party."[4] The Sailors of this engagement, armed only with Colt revolvers and cutlasses, had to run around a gauntlet of palisades and through artillery fire to the "Confederate Goliath's" Northeast Bastion. As the fort's defenders methodically picked off Sailors and Marines, Dr. Longshaw rushed to each wounded man applying tourniquets and binding wounds without regard for his own safety. One of his final acts was to save the life of a drowning Sailor before attending to the wounds of a fallen Marine under the walls of the mighty fortress.

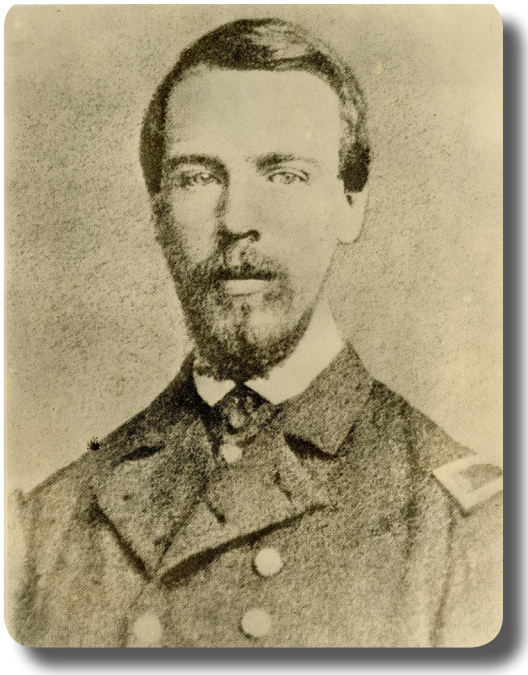
For the Sailors and Marines of the Naval Brigade, Fort Fisher was a mission of great sacrifice, but none more so than to a physician armed with only a medical kit and an impressive supply of courage. Selflessness was the embodiment of his final action—Longshaw was shot through the head and killed instantly. The bodies of both Marine and physician were later found side-by-side.

Rear Adm. Joseph Lanman[5] later reported, "[Longshaw's] bravery was conspicuous and he nobly discharged the duties of his office."[6]

And Lanman was not alone in bringing attention to Longshaw's gallantry. Lt. Cmdr. Kidder Breese, Commander of the Naval Brigade, stated that: "Of Assistant Surgeon William Longshaw, special mention should be made on account of his great bravery and attention to the wounded under the hottest fire."

Lt. Cmdr. Thomas O. Selfridge, Jr.,[7] commander of the third division of the Naval Brigade, witnessed first-hand the physician's act of valor. In his history of the battle, Selfridge recounted Longshaw's bravery.

"While kept under the walls of the fort, I was an eyewitness to an act of heroism on the part of Asst. Surg. William Longshaw, a young officer of the medical staff, whose memory should ever be kept green by his corps, and which deserves more than this passing notice. A Sailor, too severely wounded to help himself, had fallen close to the water's edge and with the rising tide would have drowned. Dr. Longshaw, at the peril of his life, went to his assistance and dragged him beyond the incoming tide. At this moment he heard a cry from a wounded marine, one of a small group who, behind a little hillock of sand close to the parapet, kept up a fire upon the enemy. Longshaw ran to his assistance and while attending to his wounds was shot dead."[8] Some 150 years after his final act Longshaw is barely a footnote in history.



Assistant Surgeon William Longshaw, 1863

BUMED Library and Archives

09-8627-1

The Life of Longshaw

Dr. Longshaw journey to Fort Fisher began on April 26, 1839 in Manchester, Va. (just outside of Richmond). He was born to Dr. William Longshaw, Sr., and Margaret Davies, both British emigrants and recent transplants to the United States at the time of their son's birth.[9] While still an infant, William and his parents moved to Kentucky

3. Admiral David Dixon Porter (1813-1891) served as the Commanding Officer of the North Atlantic Blockading Squadron and Naval Commander overseeing the First and Second Battles of Fort Fisher.

4. Gragg, Rod. *Confederate Goliath: The Battle of Fort Fisher*. Louisiana State University Press: Baton Rouge. 1991.

5. Rear Admiral Joseph Lanman (1811-1874) served aboard USS *Minnesota* with Dr. Longshaw. Lanman and Longshaw were part of the second wave of the attack on Fort Fisher.

6. Gatewood.

7. Thomas O. Selfridge, Jr. (1836-1924) would later achieve the rank of Rear Admiral.

8. Selfridge, Thomas. "The Navy at Fort Fisher." *Battles and Leaders of the Civil War*. Volume IV. New York: The Century Co. 1888.

9. According to Gatewood, the family name "Longshaw" had been changed from the French "Longchamp."

before settling in Cambridge, Mass., where his father opened an apothecary shop. This was a time when the local apothecary was akin to the village doctor prescribing medicine and administering advice on all medical matters. There can be little doubt that working at his father's shop would help mold young William's future.

Longshaw attended the Lyman School[10] in Westborough, Mass. and later the Phillips Academy[11] in Andover, Mass., where he became immersed in the classical education of the day. When he turned 16 Longshaw began studying medicine under Moses Clarke[12] in East Cambridge, Mass.; at the age of 17 he moved to New York where he attended medical lectures at New York University and continued his apprenticeship under the legendary Dr. Valentine Mott.[13] The following year Longshaw attended medical classes at the University of Louisiana[14] and supported himself by working as a drug clerk in New Orleans. A glimpse of Longshaw's character can be seen in 1857[15] during the devastating yellow fe-

10. Later the Lyman School for Boys (Established in 1846.)

11. A prestigious preparatory school established in 1778.

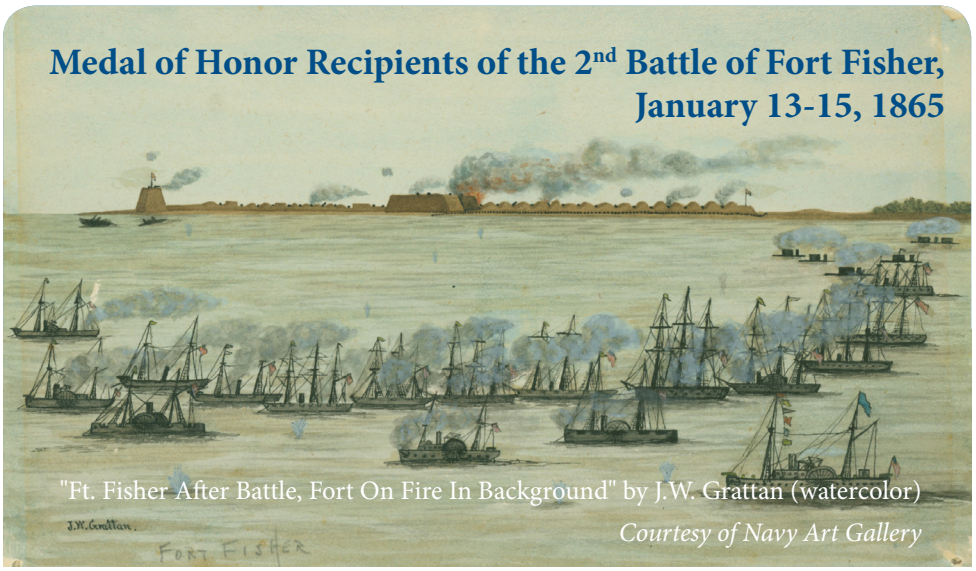
12. Moses Clarke (1818-1864) was a "City Physician" in East Cambridge.

13. Valentine Mott (1785-1865) was a famous American surgeon.

14. The University of Louisiana was established in 1834. In 1884, it was renamed after its benefactor Paul Tulane or Tulane University.

15. Over 200 New Orleneans died of yellow Fever in the 1857 epidemic. Source. "Yellow Fever Deaths." New Orleans Public Library. http://nutrias.org/facts/feverdeaths.htm.

Medal of Honor Recipients of the 2nd Battle of Fort Fisher, January 13-15, 1865



"Ft. Fisher After Battle, Fort On Fire In Background" by J.W. Grattan (watercolor)
Courtesy of Navy Art Gallery

Army
Pvt Bruce Anderson
Brig. Gen. Newton Curtis
Pvt. William H. Freeman
Pvt. George Merrill
Pvt. Zachariah C. Neahr
Col. Galusha Pennypacker
1st Lt. John Wainwright

Marine Corps
Sgt. Richard Binder
Orderly Sgt. Isaac N. Fry
Corp. John Rannahan
Pvt. John Shivers
Pvt. Henry A. Thompson
Corp. Andrew J. Tomlin

Navy
Cabin Boy John Anglin
Boatswain's Mate James Barnum
Landsman Gurdon H. Barter
Seaman David L. Bass
Ord. Seaman Philip Bazaar
Coxswain Asa Betham
Boatswain's Mate Eichard Blair
Quartermaster Edward Bowman
Seaman Albert Burton
Boatswain's Mate William Campbell
Coxswain John Dempster
Quartermaster William Dunn
Signal Quartermaster Thomas English
Signal Quartermaster Charles H. Foy
Capt. of Forecastle John Griffiths
Quarter Gunner Edmund Haffee
Ord. Seaman Thomas Harcourt
Quartermaster Joseph B. Hayden
Coxswain Thomas Jones
Quarter Gunner Daniel Milliken
Seaman Charles Mills
Capt. of the Main Top George Prance
Ord. Seaman George Province
Ord. Seaman Auzella Savage
Ord. Seaman Louis C. Shepard
Coxswain William Shipman
Chief Quartermaster Robert Sommers
Quartermaster Daniel D. Stevens
Seaman John Swanson
Seaman Edward Swatton
Capt. of the Forecastle James Tallentine
Chief Boatwain's Mate Othniel Tripp
Landsman Henry S. Webster
Coxswain Joseph White
Ord. Seaman Franklin L. Wilcox
Seaman Augustus Williams
Coxswain Richard Willis

Source: Hartke, Vance. *Medal of Honor Recipients, 1863-1973.* Washington, D.C.: Government Printing Office, 1973.

ver epidemic that hit New Orleans. As others would flee the disease, Longshaw braved it and assisted local physicians in caring for the misfortunate.

In 1858, Longshaw attended the University of Michigan School of Medicine, graduating with a medical degree in 1859.[16] The few sources on Longshaw's life do not reveal the course he took over next three years, but we do know he entered the Navy as an "Acting Assistant Surgeon" on June 25, 1862.[17] He briefly served aboard the side-wheel gunboat USS *Yankee* as part of the Potomac Squadron before taking the requisite medical boards at the U.S. Naval Asylum in Philadelphia, Penn.[18]

Since 1824, all physicians applying for Navy commissions were required to pass a professional examination before a "Naval Medical Board." The board tested the candidates "mental, moral and physical" qualifications required for arduous duty at sea. It was purportedly a difficult examination and hundreds of candidates were rejected outright throughout the first century of the board.

As a candidate for a commissioned physician billet, Longshaw[19] would have been examined in the topics of "General Aptitude," "Literary and Scientific Acquirements," "Anatomy and Physiology," "Principles and Practice of Medicine," "Principles and Practice of Surgery," "Obstetrics," "Materia Medica," "Medical Jurisprudence," and "Chemistry." He passed his examination with an aggregate score of 595 out of a possible 780.[20, 21] And upon vacancy, Longshaw received a full commission as an Assistant Surgeon on November 9, 1862. He served aboard a receiving ship[22] at Boston from November 21, 1862 until March 16, 1863 when he received orders to the single-turret monitor USS *Passaic*. In March 1863, Passaic sailed to join the South Atlantic Blockading Squadron, one of five blockading squadrons operating off Confederate ports. She saw action in April 1863, taking part in the attack on the defenses of Charleston, S.C. Longshaw remained on the ship until May 1863 when ordered to USS *Penobscot* and then on August 11 to USS *Lehigh* where he would first distinguish himself in the heat of battle. On December 30, 1863, Longshaw detached from *Lehigh* and joined the crew of USS *Minnesota*, flag-ship of the North Atlantic Blockading Squadron destined for Fort Fisher.[23]

Like the landings on Okinawa 80 years later, Fort Fisher was a massive amphibious operation; the battle would ultimately would close Wilmington, N.C., the last major port in the Confederacy and bring victory to the Union one step closer. But unlike medical personnel in the Okinawan campaign, the heroic efforts of medical men like Longshaw were never acknowledged with combat awards. At Okinawa, Navy physicians were awarded 4 Navy Crosses, 6 Silver Stars, and 84 Bronze Stars; hospital corpsmen were awarded 3 Medals of Honor, 9 Navy Crosses, 47 Silver Stars, and 126 Bronze Stars. The Second Battle of Fort Fisher yielded 53 Medals of Honor for Army, Navy, and Marine Corps personnel, but none for medical personnel.[24]

Generations after that conflict, the U.S. military services established additional combat awards—the Navy Cross, Silver Star, and Bronze Star—to honor

16. The next three years of Longshaw's life are not documented in any source.

17. "Acting Assistant Surgeon" was a designation that denoted a temporary appointment status.

18. An institution that served as a Naval Hospital, Naval Home for "Indigent" and site for medical entrance examination for new Navy physicians.

19. According to the Medical Board Records (BUMED Archives), Longshaw is described as " 5 feet 8 inches, light complexion, grey eyes, dark hair."

20. Minimum passing score was 540.

21. Between 1861 and 1865, only 164 out of the 338 applicants passed (42.27%), while 224 (57.73%) did not qualify.

22. A receiving ship is a vessel that is used in harbor to house newly-recruited sailors before they are assigned to a crew.

23. On November 15, *Lehigh* took part in the defense of the federal works on Morris Island off Charleston. During the action, *Lehigh* would find herself caught under the batteries of nearby Sullivan's Island which soon fired upon her. The ship was struck 22 times by nine batteries. USS *Nahant* came to tow *Lehigh* but her hawsers were being shot away. Longshaw took it upon himself to carry the lines of the first two hawsers between the ships, making two trips under cannon and mortar fire. When casualties appeared, Longshaw rushed to the aid of the wounded. The ship was eventually refloated and saved. Rear Adm. John Dahlgren, the Commanding Officer of the South Atlantic Squadron, and Dr. William Whelan, Chief of the Bureau of Medicine would later commend Longshaw for his actions.

24. The Medal of Honor was established in the 1863 for the purpose of "honoring extraordinary acts of valor" on the battlefield.

"Admiral Porter's Fleet Celebrating the Surrender of Ft Fisher. *Harpers Weekly* (83-44-O)

Courtesy of Navy Art Gallery

acts of heroism. New naming policies were also established to allow service personnel to be remembered through ship names, streets, and buildings.

Since 1920—when three ships were posthumously named after a World War I dentist (Osborne), a Hospital Corpsman (Litchfield) as well the first Surgeon General of the Navy (Wood)—37 ships have been named for individual Navy medical officers and enlisted personnel. Of these, 23 ships were named in honor of individuals who either gave their lives and/or saved lives on the battlefield. And of this number, ten were also Medal of Honor recipients, three were recipients of the Navy Cross, eight were recipients of the Silver Star, and one posthumously received the Distinguished Service Medal. This leaves only one ship namesake without a combat award—William Longshaw.

In 1943, the Fletcher-class destroyer USS *William Longshaw* was commissioned and served at the Battles of Tinian, Leyte Gulf, and Okinawa. In May 1945, while on patrol, the ship ran aground on a coral reef south of Okinawa's Naha airfield and became a target for Japanese shore batteries. Eighty-six men died or went missing, including her skipper. In addition to the dead and missing, 95 crew members were wounded. One hundred and thirteen crew members survived the sinking. Longshaw's name did not.

Conclusion

Often war heroes get trapped in that great act on the battlefield. Sgt. Alvin York will forever be remembered for picking off German machine gunners with his M1917 Enfield rifle; John Bradley will always be raising the second flag on Mt. Suribachi. But does the act alone make the hero "great?" Even in mythology, the seven labors of Hercules comes after the hero has established his humanity—has loved, has lost, has become invested in life. What makes the Sailor, Soldier, Marine, Airman, or even the heroes of our myths sacrifice that investment? As Joseph Campbell asserted in his lengendary tome *The Power of Myth*, the "sacrifice" is the key feature of all heroism. "The moral objective is saving the people, or saving a person, or supporting an idea. The hero sacrifices himself for something greater - that's the morality of it."

Dr. Longshaw was not quite 25 when he sacrificed himself for another. What made this act even more selfless was that on the day of the engagement he had been granted a leave of absence, but postponed his departure so he could take part in the assault.

Do all heroic acts deserve rewards? It is true that posthumous honors can be slippery slopes leading to the inevitable question: where does it all end? Do we give combat awards to individuals who served long before these honors were even established? Do we nominate Stephen Decatur for the Medal of Honor for burning the *Philadelphia*?

Longshaw's case is one of a hero deserving remembrance of some kind. However, today there is no plaque, no ship, no building, no award, no street that bears his name. Record of his role in Fort Fisher was masterfully captured in an article by Medical Director James Gatewood, USN in 1913, who declared Longshaw for the ages: "The living owe themselves that his name shall be an inspiration forever." Gatewood's call today gone unheeded.

With each passing year the life of Longshaw becomes more distant, his actions increasingly faded from memory like his footprints on that sandy path to Fort Fisher. Longshaw had no children. His last surviving relative, brother Luther, died in the 1920s without living heirs. And there are no Longshaw heirs to stoke the flames of his memory or elevate his name above footnote status. As we approach the 150th Anniversary of the Second Battle of Fort Fisher the present offers a crowning moment for reflection and a fitting opportunity to remember one of Navy Medicine's unsung giants. ❁


Sophia V. Hall
Minneapolis, Minn.

Chief Nurse Sophia Valentine Kiel's Splendid Medal

By Cmdr. (ret) Catherine Leahey, USN

One of America's most decorated women in 1919 hardly fit the profile of the usual recipients of awards and honors bestowed during World War I. She was not an officer, a combat hero, the head of a large civilian relief agency, or a person of noble background. Born in Manhattan in 1879 to working-class German immigrants, Sophia Kiel grew up in the city's lower eastside tenements, surrounded by slaughterhouses, iron foundries, and brick factories. She worked in her uncle's butcher shop before graduating from St. Luke's Hospital Nursing Training School in 1908. When the Great War erupted in Europe, Sophia traveled to Russia under the aegis of the American Red Cross to care for Russian battlefield casualties. Her first posting was an American-run hospital in Kiev several hundred miles behind the Caucasian front with Austria-Hungary. Caring for convalescents bored her, but she found more challenging work a year later when she was reassigned as chief nurse of a military hospital supporting Russian forces fighting in Turkey. First, however, she and her nursing staff had to convert a 200-camel, adobe caravanserai, in Khoy, Persia, into a 250-bed hospital, even as they battled a typhus epidemic. For ten months, until the collapse of the Ottoman Empire, Sophia nursed wounded and frostbitten Cossacks, diseased Turkish prisoners of war, and starving Armenian refugees.

Grand Duke Nikolai Nikolaivitch, second cousin of the tsar and commander in chief of the Russian army, awarded Sophia the St. Anne Medal (silver) for her work in Kiev and the St. Anne Medal (gold) for her service in Khoy.[1]

The St. Anne Medal was one of the few imperial military awards he could bestow on foreigners to recognize acts of courage or daring not performed during combat. The medal featured a cross surmounted by the Romanov crown and hung from a red ribbon edged in yellow. Sophia also earned the American Red Cross World War I Service Medal, with "Overseas Service" bar, and the Russian Red Cross Medal. She attached little value to these medals and seldom wore them. "Personally, I am not keen about medals in Russia," she wrote a friend, "One can obtain them too easily."[2]

Sophia returned to the United States after two years with the Russian army to become the assistant directress of

The Russian St. Anne Medal

Image courtesy of the Journal of Antiques (journalofantiques.com)

1. *Reports of the Alumnae Association of St. Luke's Training School for Nurses, 1902-03 and 1918-1919.* New York: St. Luke's Training School for Nurses, 1938). p38.

2. Sophia V. Kiel, letter to Clara Noyes, 29 January 1917; RG 200 Box 49; NARA II.

nurses at her nursing school. When the United States entered World War I, she organized a detachment of twenty nurses for duty at the Naval Hospital in Brooklyn, N.Y. Her résumé so impressed Navy Nurse Corps Superintendent Lenah S. Higbee that Sophia entered naval service as an acting chief nurse. "I do not believe there is any phase of Navy work," Mrs. Higbee declared, "in which she did not qualify."[3] Her wartime naval service garnered Sophia the Navy's Victory Medal, awarded to all Navy personnel on duty between April 1917 and November 1918.

USS *George Washington*

Courtesy of Naval History and Heritage Command

In December 1918, Sophia received orders to transport ship USS *George Washington*. She and Nurse Eveline Augusta Clarke, her friend and fellow alumna of St. Luke's, were the first Navy women assigned to permanent duty aboard an American naval vessel. Six more nurses joined them in January to care for the hundreds of sick and wounded soldiers *George Washington* brought home on each voyage from France. "The Big George" also catered to statesmen, flag officers, and foreign dignitaries who preferred to cross the Atlantic in the former German luxury liner's deluxe first class cabins. On Sophia's first voyage, President Woodrow Wilson occupied the best suite on board as he traveled to the Paris Peace Talks; he would sail three more times on *George Washington*. King Albert and Queen Elisabeth of Belgium embarked in September 1919 to travel to the United States to thank Americans for supporting the Belgians during the war. Sophia described the queen's shipboard activities in a letter to Clara Noyes, Director of the American Red Cross (ARC) Society Bureau of Nursing Services:

[Queen Elisabeth] showed a great deal of sympathy when going through the Sick Bay; there was one patient, a post operative appendectomy whom she visited three times during the voyage. On one of these visits to Sick Bay, Captain McCauley, our Commanding Officer, asked me to show Her Majesty the lovely warm robes and extra comforts that the A. R. C. provided for the thousands of sick and wounded transported by the "G. W." Here I took the opportunity to show one of the Belgium Baby Kits made up by the Red Cross and of which we had been given six for emergency use, when we were transporting the French brides of our soldiers, some of which [sic] were prospective mothers. Her Majesty was very impressed with the completeness of the lay-out and the amount of thought given to every detail by American women.[4]

Sophia expressed "genuine pleasure" at having the royal family on board "not only because of the gallant little country they represent" but because they "measured up to our ideals and have our sincere affection." Queen Elisabeth grew up surrounded by luxury and privilege. Her father, Duke Karl-Theodor in Bavaria, was a distinguished ophthalmologist who ran a celebrated eye clinic. He taught Elisabeth basic medicine and encouraged her to earn a Doctor of Medicine from the University of Leipzig. After her marriage, Elisabeth championed medical service in her new country. She continued to live in the unoccupied area of Belgium after

3. Lenah S. Higbee letter to J. Beatrice Bowman, 7 November 1918; Navy Nurse Corps Records box 1; Operational Archives Branch, Navy History and Heritage Command.

4. Sophia V. Kiel, letter to Clara Noyes, 30 October 1919; RG 200 Box 49; NARA II.

the German invasion in 1914 despite the dangers. She visited field hospitals at the front daily, often assisting surgeons in operations.[5] Her bravery and selflessness were well known to Americans who called the doughty queen "the First Lady of the War."

The night before reaching New York, Elisabeth invited Sophia to dine with the royal family and used the occasion to bestow the Order of Queen Elisabeth on the chief nurse. Elisabeth had created her own wartime medal in 1916 to recognize women who had personally helped Belgian soldiers or civilians. The bronze medal was surmounted by a red enamel cross within a palm wreath and suspended from a gray ribbon with purple edging. A bust of Queen Elisabeth appeared on the face of the medal, around which were the words "Elisabeth Reine des Belges" (Elisabeth, Queen of Belgium). The obverse had a relief of the "Lady with the lamp" and the Latin motto *Pro Patria Honore et Caritate* (For Country, Honor, and Charity).

Elisabeth knew that Sophia's five years of wartime service never included Belgium so the queen designated her a representative of all American nurses who had labored for the Belgians. Countess Caramon, the queen's lady-in-waiting, ushered Sophia into the queen's apartment where Elisabeth declared, "I want to pin this medal on you for your war services and in appreciation of the work the American women have done during the war, especially the nurses. They are such splendid women; I have seen and worked with them in the hospitals. I like American nurses, they are so human."[6]

This was the one medal that Sophia treasured, partly because so few women received this recognition, but mostly because she greatly admired the queen. "It was indeed a great honor," she wrote Clara Noyes, "to have her most charming Majesty, Queen Elisabeth of Belgium, pin the medal of her own Order upon my uniform. She has always been my ideal of a woman and Queen; nothing could have made me happier than to receive her personal recognition of …[my] help to the Allies during 1914, 15, and 16."[7]

Sophia Kiel remained on active duty until 1923 when a cable car accident in San Francisco left her partially paralyzed. She returned home to Manhattan and worked part-time at St. Luke's Hospital until her death in 1957. Queen Elisabeth continued to lend her support to medicine, founding the Queen Elisabeth Medical Foundation for medical research in 1926. She outlived her husband and died in 1965.

ABOUT THE AUTHOR

Cmdr. Leahey is a retired Surface Warfare Officer who spent more than 13 years at sea, and was one of the first non-medical women assigned to auxiliary ships. She is currently working on a book about the history of women's service aboard Navy ships. If you would like to reach Commander Leahey to share your stories of service please contact her at: caleahey@earthlink.net.

Nurse Sophia Kiel aboard
USS *George Washington, 1918*
Courtesy of Naval History and Heritage Command

5. Legend says that the Germans did not dare shell the areas near the hospitals for fear that they might injure Elisabeth, who was the niece of their ally, the Austrian emperor.

6. Kiel Letter.

7. Ibid.

Remembering Naval Base Hospital No. 1

Aerial View of Base Hospital Londonderry, Northern Ireland.
In this article, Mark Lusby, a researcher based in Londonderry, Northern Ireland, brings to light the story of the U.S. Navy's Creevagh Hospital and Dispensary, located close to the border between Northern Ireland and the Republic of Ireland. The site is just 4 miles from the historic port city of Londonderry, also known as Derry.
All images courtesy of National Archives and Records Administration

A World War II Hospital on the Irish Border

By Mark Lusby

As you drive from Derry to Killea, out the Old Letterkenny Road, you will notice a grand house set well back from road, shrouded in woodlands. This is the Creevagh House, now owned by the Lynn family but originally built by the Babingtons, around 1780. Your impression of the place is one of rural tranquility, interrupted only by the occasional bustle of farming activity. However, 70 years ago, during the Battle of the Atlantic, the scene was very different.

On February 5th 1942, the U.S. Naval Operating Base (NOB), Londonderry was commissioned as "ready for action," and it was spread right across the city on eight sites, each with separate functions. Creevagh House, and 27 acres surrounding it, was one of these sites and by mid-April 1942 it had been transformed into a self-contained hospital, operated by the U.S. Navy's Medical Department.

Work on constructing the facilities in Derry for the U.S. Navy had originally begun in secret during the summer of 1941. The construction was undertaken by American civilian technicians, working under the direction of the U.S. Navy Civil Engineer Corps. Material was assembled at Quonset Point, R.I. under the guise of being material for TAFs (Temporary Aviation Facilities) and shipped to the Derry U.S. naval base, code-named "Base One Europe."

The U.S. Navy's Creevagh Hospital comprised 147 buildings all based on the Quonset hut, a lightweight prefabricated structure of corrugated galvanized steel, with a semicircular cross-section. The core of the Creevagh Hospital area was its medical facilities including two operating theatres, a laboratory and x-ray building, a dental and pharmacy building, 15 specialist and general wards, a drug store and a mortuary. To service a hospital accommodating 200 patients, Creevagh also had to provide for the needs of up to 193 personnel and the rest of the buildings were barracks, canteens, a barber shop and an armory.

The commanding officer for the hospital was Capt. Brython Parry Davis (1890-1953) of the Navy Medical Corps. Amongst his duties was to greet any dignitary who came to Creevagh, including King George VI, First Lady Eleanor Roosevelt, and Bob Hope. BUMED'S Office of Medical History is fortunate to have a scrapbook compiled by Capt. Davis during his time at Creevagh and work is planned with U.S.-based photo researcher, Susan Strange, to better catalogue and describe its contents.

Papers in the National Archives and Records Administration in Maryland contain muster rolls for rescued crews of vessels, torpedoed in the North Atlantic, who were treated at Creevagh Hospital. Papers also show the general care given to the 5,000 Navy, Seabees and Marine Corps personnel who operated the U.S. Naval Base from 1942-44. In his book *Foxy 29: From the Sea Came Heroes*, former Master Chief Jo-

A WWII military publication illustrating how the complete infrastructure for the U.S. Army and Navy installations across Northern Ireland were shipped.

seph Earhart Sardo III suggested that the hospital in Derry was also used to train doctors and Corpsmen for combat units to be assigned to LSTs during the D-Day landings.

In the run up to D-Day, men and materials which could not directly go the south coast of England, were regularly diverted to the U.S. NOB in Derry. The War Diary for February 8th 1944 reports that "Commander Henry W. Hudson, USNR arrived with 47 officers & 517 men of a medical unit; quartered at Beech Hill pending transfer to Netley." This Special Navy Advance Group 56 (SNAG-56) was to become Navy Base Hospital No. 12 located at the Royal Victoria Hospital in Hampshire, England, to care for the D-Day casualties. In summer 2014, Commander Hudson's family are due to visit Derry and the Base One Europe Museum.

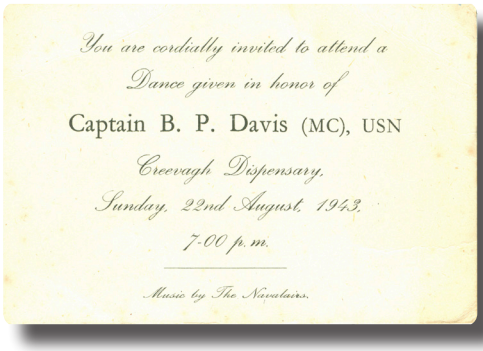
In the summer of 1944, the Battle of the Atlantic was at an end and the focus of the conflict was in mainland Europe and the Pacific. U.S. NOB Londonderry, including Creevagh Hospital, was largely decommissioned and returned to the British Admiralty by September 1944.

Seventy years on, the physical remains of the Navy's Creevagh Hospital have almost completely disappeared, apart from the imprint in the woodlands left by the bases of the Quonset huts. A marker plaque was set into the ground a few years ago near the entrance to Creevagh House. Plans, photographs and ephemera assembled for the Base One Europe Museum, at the Beech Hill Country House Hotel in Derry, help to remind us of the active part which Creevagh played during World War Two.

First Lady Eleanor Roosevelt visited Creevagh Hospital during her stay in Derry on November 11, 1942. On the right of the photo is Capt. B. P. Davis, MC, USN who was the senior officer at Creevagh Hospital and on the left is a Commander Wescott.

ABOUT THE AUTHOR

Mr. Mark Lusby is a researcher based in Londonderry, Northern Ireland who is documenting the stories of and about the hospital. Anyone with memories which could help fill out the story of the Creevagh Hospital are encouraged to email him at: Mark Lusby at mark@holywelltrust.com.


You are cordially invited to attend a
Dance given in honor of
Captain B. P. Davis (MC), USN
Creevagh Dispensary.
Sunday, 22nd August, 1943.
7-00 p.m.
Music by The Navalaires.

BASE ONE MUSEUM

The Base One Europe Museum is located in the Beech Hill Country House Hotel and was developed by the Beech Hill U.S. Navy and Marine Corps Friendship Association. During WWII, Beech Hill Camp in the woodlands around the present-day hotel was filled with Quonset huts, and like Creevagh was part of the U.S. NOB Londonderry from 1942-44. Its function was as an accommodation camp for Navy and Marine Corps personnel. Entry to the museum room and woodland trails is free, see www.beech-hill.com for details.

Navy Base Hospitals, 1942-1945

Londonderry was the first of 21 Navy base hospitals established in World War II. Along with mobile/fleet hospitals, Navy base hospitals hospitalized many thousands of casualties, mainly from the Pacific, throughout the war. Although limited in mobility and needing "considerable shipping space to transport and time and effort to establish," their value as temporary hospitals on rear and forward areas cannot be disputed.

No. 1. Londonderry, Northern Ireland

No. 2. Efate Island, New Hebrides

No. 3. Espiritu Santo, New Hebrides

No. 4. Wellington, New Zealand

No. 5. Casablanca, French Morocco

No. 6. Espiritu Santo, New Hebrides

No. 7. Tulagi, Solomon Islands

No. 8. Pearl Harbor, T.H.

No. 9. Oran, Algeria

No. 10. Sydney, Australia

No. 11. Munda, New Georgia

No. 12. Netley, England

No. 13. Milne Bay, New Guinea

No. 14. Finschafen, Hollandia

No. 15. Manus, Admiralty Islands

No. 16. Woendi, Schouten Islands

Navy Base Hospital No. 3, Espiritu Santo.
Base Hospital No. 3 was the first base hospital established in the South Pacific. From May 4, 1942 to December 31, 1942 the hospital admitted 2,949 patients with malaria alone; from August 7, 1942 through September 1943 it received many of the casualties returning from the Guadalcanal Campaign.

BUMED Archives

12-263-002

No. 17. Hollandia, New Guinea

No. 18. Guam, Marianas Islands

No. 19. Tinian, Marianas Islands

No. 20. Peleliu, Carolina Islands

No. 21. Kwajalein Island, Marshall Islands

Sources. *The History of the Medical Department of the United States Navy in World War II. A Narrative and Pictorial Volume.* Navmed P-5031. Volume 1. Washington, D.C.: Government Printing Office.

From the Surgeon General of the U.S. Navy: Marine Units in France, 1917-1918

It was no easy task for our naval medical men collected from ships, shore stations, hospitals, and civil life to acquire a knowledge of Army routine and adapt themselves to the requirements of Army field service, but the medical officers assigned to Marine contingents sent abroad displayed an energy and versatility which soon qualified them for their duties.

The Marines were at first assigned to provost marshal and other duty along the coast and in various inland towns of France. They built roads and reservoirs, camps, and docks. The naval medical officers accompanying them were appointed health inspectors, assigned to the work of preventing venereal disease, served as senior surgeons at large Army camps and cheerfully rendered all possible aid to civilian communities whose physicians were absent, almost to a man, with no colors.

Early in 1918, the Fourth Marine Brigade, the only one then present in France, was incorporated with the Second Division and assembled in the Department of the Vosges for special training. All medical officers serving with Marines were thus brought under one Marine Commander but without any unification or centralization of medical command since the Army organization does not provide for a brigade surgeon. Each regimental surgeon acted independently and there were also medical officers in the Marine Machine Gun Battalion which acted as an independent unit. All brigade units were billetted in military barracks, houses, barns, storage sheds, etc., and their medical officers not only gave professional service to the troops, but acted as local sanitary officials and treated the native population.

During the training period a medical officer from each of the Marine regiments was detailed for instruction at an Army sanitary school [in Langres]. One naval medical officer had attended a part of the session of the First Corps school in autumn of 1917.[2] Three members of the naval Dental Corps attended the special course for dentists at the sanitary school. Our medical officers also received instruction at the British Army Sanitary School near Arras and attended clinics in the French base hospitals of Paris and vicinity.

It was in the trench area near Verdun, occupied by the Second Division in March, that our medical officers first participated in military operations ashore in France. The superb medical and surgical equipment provided by the Medical Department of the Navy was far in excess of what could be transported to the battle front and much of it had to be stored in the training area, where it was later appropriated by the Army, as the Second Division never returned to its original area owing to the nature of the military operations. When their medical stores were available and after experience had taught what was needed the Army made adequate provisions for the Marine units. The early periods of service under the Army were not without disappointments and anxiety for the medical officers serving with the Marines. The Navy men were without representation on division staff and were accustomed to more liberal provision of stores. Divisional representatives rarely communicated with Marine medical units, and officials in the rear exacted certain procedures without a full knowledge of conditions at the front. Nor did it seem to our surgeons that their patients always received a maximum of consideration in the divisional field hospitals. Just prior to the Champagne offensive, at the end of September, however, a naval medical officer was assigned to the divisional staff as assistant division surgeon, and this measure proved of great value in unifying and coordinating the medical services of Army and Marine Corps units.

Naval medical officers and Hospital Corpsmen were in action from the time when the Second Division was thrown across the road from Paris to Chateau-Thierry, June 1 until November 11, participating at Belleau Wood, Soissons, in the Argonne, [and] at the crossing of the Meuse.

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1. *Annual Report from the Surgeon General of the U.S. Navy*, Washington, D.C: Government Printing Office, 1919. pp19-21.
2. Lt. Cmdr. Joel T. Boone, Medical Corps, USN

Members of the Third Battlion 6th Marine Regiment near Colombey les Belles, France, August 1918
BUMED Archives

It was conclusively demonstrated by the campaign that regimental and battalion surgeons must be men in the prime of life. The Bureau [of Medicine and Surgery] made wise selection in its assignments, and though some of our men in France had little or no previous service they quickly developed to meet the resposnibilities resting upon them. A regimental surgeon with Marines had under him at least 6 other medical officers, 3 dental officers, a minimum of 50 Hospital Corpsmen, and was responsible for the professional care of 3,700 men, as well as for all the details of surgical and medical supplies, battle casualty lists, and the evacuation of the wounded to the rear. When in rest billets—the Second Division was never out of line more than two week—there were many added burdens of adminstration and training.

One of our medical officers, originally sent to France as a battlion surgeon with [the] Marines, was eventually assigned to command an Army division field hospital, later became director of four Army division field hospitals, and prior to his return to the United States served as sanitary inspector for an Army division.

A naval dental surgeon, originally a battalion dentist, became division dental surgeon. Several of our naval medical officers were assigned to Army ambulance companies and Army division field hospitals. The medical personnel of the Fifth Brigade of Marines did not have the opportunity to serve on the battle front, but their work was no less valuable to themselves.

In the cases where our medical officers were detached from their original Marine units for work with the Army proper they did good work, proving once again the Navy man's usefulness whether afloat or ashore.

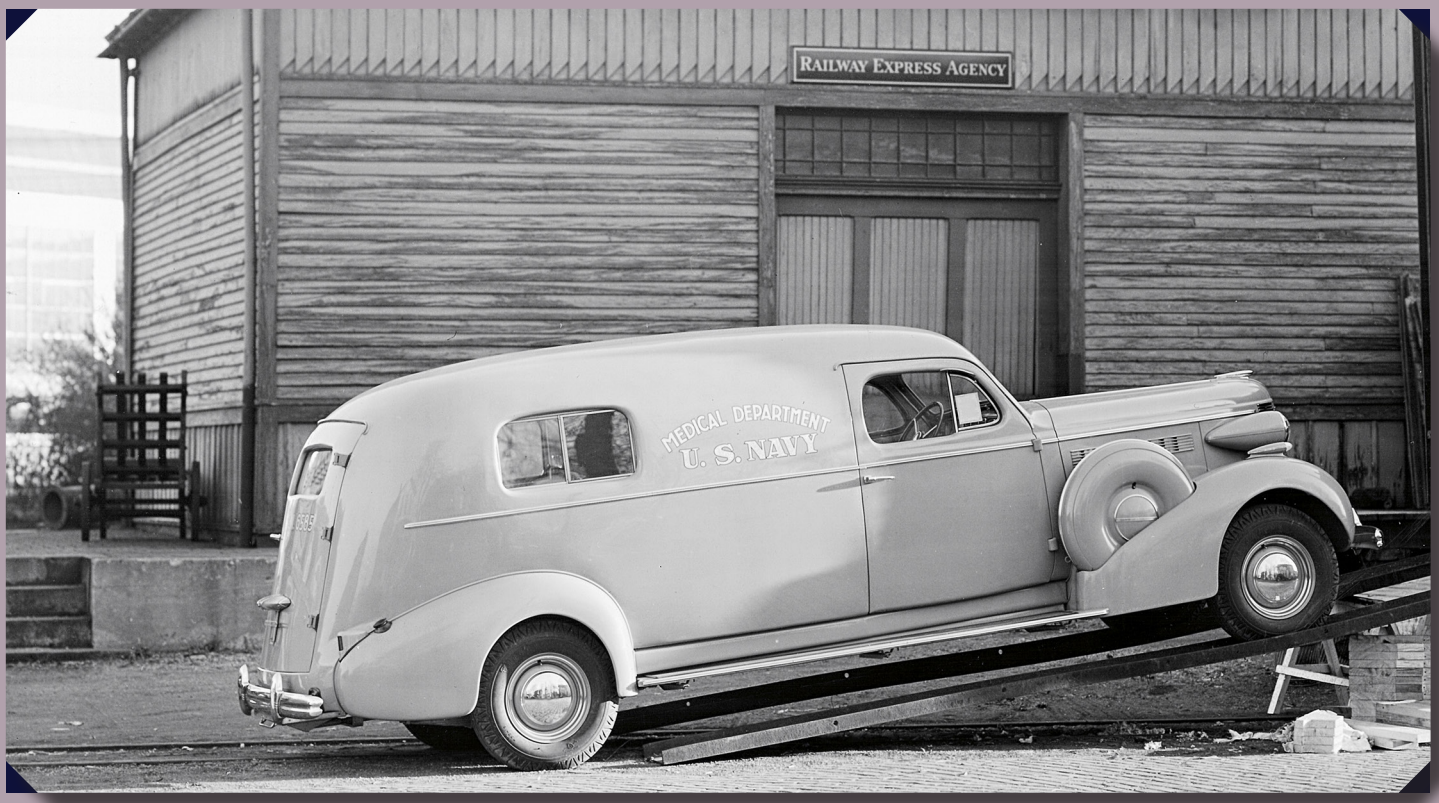
Major Navy and Marine Corps Operations:
Aisne (Belleau Wood)—May 29 to June 5, 1918
Aisne-Marne (Vierzy)—July 18-20, 1918
St. Mihiel (Thiacourt)—September 12-16, 1918
Meuse-Argonne
(Champagne Region)—October 1-10, 1918
(Landres Ste. Georges-Mouzon)—November 1-11, 1918

Major Navy and Marine Corps Defensive Sectors:
Toulon-Troyon Sector (Verdun)—March 15 to May 14, 1918
Chateau-Thierry Sector—June 6 to July 9, 1918
Marbache Sector (Pont au Mousson)—August 1 to 18, 1918

Navy Ambulances of the Inter-War Years

A Look back at Navy Medicine's Buicks and Packard-Henney's

Throughout the 1920s and 1930s, Buick and the Packard-Henney company were among the leading suppliers of Navy ambulances at hospitals in the Continental United States. The following snapshots of these vehicles come from the private collection of Mr. Thomas McPherson and are presented with his permission.



CAPTIONS: (Top) Packard-Henney being loaded into a haul-away trailer being pulled by a GMC truck. ca. 1930s. (Bottom) A brand new fleet ready Navy Packard-Henneys ready to hit the streets. ca. 1939.

CAPTIONS: (Top) A fleet of Flxible (not Flexible)-Buicks waiting for distribution to Stateside hospitals. ca. 1934. (Bottom)Hospital Corpsman taking a Flxible-Buick Navy ambulance out for a spin. ca. 1930s.

An Accident in Northern Sinai

By Dr. Ibrahim Helmy

For over thirty years Dr. Ibrahim Helmy worked at the U.S. Naval Medical Research Unit No. 3 (NAMRU-3), in Cairo, Egypt as a medical zoologist. His publication, The Contemporary Land Mammals of Egypt (including Sinai)*, co-authored by Dale Osborn, would help cement his reputation as one of the foremost authorities on Egyptian wildlife. Throughout his career Helmy was dedicated to the cause of wildlife conservation and environmental issues—a commitment that remained strong even after a near-fatal accident in 1987. The following account of this incident in Northern Sinai is taken from his unpublished autobiography,* Ibrahim Helmy, A Life in the Desert *edited by Ms. Susan Woodfin, Public Affairs Officer, NAMRU-3.*

In late August 1987, I went on a field trip to an area in Northern Sinai near El Arish to gather animal sera for leishmaniasis work. Our NAMRU-3 team was headed by Dr. John Morrill of Virology, and included Dr. Andrew Main from Medical Zoology, Egyptian staff, including Dr. Boulos Botros, a veterinary virologist, Ahmed Haggag, a technician, Hassan Abu Zeid, a driver, and our contracted Egyptian hunter, Rashed El Rifai. There were two groups: one to draw blood from rodents, mostly gerbils and [gerbil-like] jirds that we had trapped in the desert and the other to work with domestic farm animals. We took a van and I drove a pick-up.

We had made the arrangements for the trip with the veterinary department of the Ministry of Agriculture in Cairo; so the local staff was expecting us. We were surprised when they told us that there would be no problem working on domestic animals, but work in the desert would require permission from Egyptian military intelligence. We would have to be assigned an escort in the Egyptian military zone because there were landmines. Permission could take up to five days.

Dr. Botros, who was the Egyptian team leader, and I discussed whether we should wait for the military escort or get started. While I felt we should wait for official permission, we finally agreed that I would only go back to the place where I had previously set out light traps for sand flies with the El Gorah Multinational Force and Observers in 1985. The Americans in our group were not aware of these issues.

For two days, we set and then collected our traps in the desert according to plans. In the evenings, we checked the trapped rodents for external parasites and drew blood. We had spent the first three nights at a hotel, but for the fourth night, I told Dr. Morrill and Dr. Main that it would be better to sleep where we'd put the traps. So we loaded

Setting Traps in El Arish

All photographs courtesy of Ms. Susan Woodfin

our sleeping bags, gear, food, the ice chest and water in the pickup. There were also two full drums of gasoline holding 400 liters in the back of the pickup and the 120-liter gas tank on the pickup was full.

We headed out from El Arish at about 3:30 in the afternoon, with Dr. Main sitting next to me and Dr. Morrill sitting next to the door. Rashed and Ahmed Haggag were in the back of the pickup. I followed the same tracks I'd driven over the two days before. When we reached the area, I stopped the truck and told Dr. Main that we could set up camp by some sand dunes and then start work. I felt the truck wasn't on level ground, so I got out to look. I found the front wheel of the truck over a small mound where sand had collected, and there were small plants growing out of it. I told everyone to stay in the truck, because I had seen a flat area to move to.

I got back in the truck, closed the door and started the engine. After that, I don't know what happened. Time stopped when the mine exploded.

It's hard to believe that there was no fire following the explosion, but because the explosion had melted the lines carrying gas to the carburetor, the gas tank didn't ignite. They told me later that there had been a lot of smoke, but I didn't see anything—I didn't even hear the sound of the mine exploding. For me, it was as if it hadn't happened. My memory stopped.

I learned that Morrill and Main opened the passenger door and got out. There was so much smoke, they couldn't see me, and because they were unharmed, they thought that nothing had happened to me and I had gotten out on the other side. When they made their way around the truck, they found Rashed pulling me out.

Dr. Helmy's vehicle after the accident.

They laid me on top of a sleeping bag. I didn't feel anything, but Rashed told me that I kept asking what had happened. Dr. Main and Dr. Morrill took off their shirts and tore them into strips to stop the bleeding.

Rashed told me that I had a major cut on my throat and when he found air bubbling out of it, he used a roll of toilet paper to stop it up. Ahmed Haggag ran about five kilometers back to the paved road to get help. When he tried to flag down cars, most of them just kept going because what they saw was a man covered in black from the explosion. He finally got taken to the police station, contacted the rest of the NAMRU group to come and arranged for an ambulance. But when the ambulance got to the place to leave the main road and go into the desert, the driver refused. He demanded that the group bring me out because of the land mines. Our driver, Hassan, now with Ahmed, convinced the ambulance driver to let him drive the ambulance into the area.

Meanwhile one of the military commanders had heard about the accident, and came by helicopter. Rashed told me I talked to him, but I don't remember it. The commander wanted to airlift me to Israel. He couldn't transport me to Cairo because it would have involved crossing the Suez Canal and that required permission from the Egyptian Ministry of Defense. It was a Friday, Egypt's day off, so it was impossible to get permission. The commander said he didn't care what my nationality was, that I was a human being and he needed to save my life by taking me to the nearest hospital. But when he told the local police that he wanted to take me to Israel, they refused, insisting that as an Egyptian I must go to an Egyptian hospital. So, I was taken to the small, local hospital in El Arish.

Dr. Morrill told me that the hospital staff refused to admit me because my blood pressure was so low and so much else was wrong with me. When they refused, Dr. Morrill told them that he would start treating me if they would

bring IV's. He was a veterinarian and had good knowledge of first aid. After Morrill got me stabilized in the ambulance, they took me inside. The people with me said that Morrill and Main had arrived at the hospital in their underwear, because they'd cut up their clothes to wrap my wounds.

Back in Cairo, the Commanding Officer, Capt. James Woody, worked hard to arrange for the Embassy to send an ambulance to bring me from El Arish. Arrangements were going slowly and Woody was worried that if I didn't get back to Cairo soon, I'd die.

Meanwhile, Dr. Botros insisted that they tell my wife Samia what had happened, because he knew that I had been working with President [Hosni] Mubarak's wife, Suzanne, on establishing the Egyptian Children's Museum, and she could help me. Dr. Botros told Samia to tell Mrs. Mubarak that they needed a helicopter to transfer me to Cairo. Five minutes after speaking to her secretary, Mrs. Mubarak called Samia and told her that the president had been informed and had given an order to take me to the Maadi Military Hospital, because it was a military matter.

So a helicopter from Ismailia was sent to get me. Dr. Morrill, Ahmed Haggag and two doctors flew with me. They took my blood pressure every five minutes till I arrived.

President Mubarak had given an order for all the staff to be there when the helicopter arrived. I found hundreds of people waiting, including Capt. Woody.

The accident had happened at five p.m. on Friday, and I arrived in Maadi at two in the afternoon on Saturday. When I saw Samia, I told her, "What can I do? It happened." She was strong, but my son Hany was young and it was hard for him to understand.

I had so many things wrong with me that they didn't notice a finger was broken and my right tibia had been broken in three places. I kept complaining about pain and finally got Samia to call the director of the hospital. They finally took more x-rays and realized I was right.

Capt. Woody applied for Secretary of the Navy Designee Status for me, which allowed me to be treated at the Naval Hospital in Bethesda, Md. I had been at the Maadi Military Hospital for about two months before leaving for the United States.

While on a field trip in Northern Sinai, Dr. Helmy survived a land mine accident, but lost his leg, arm and sight in one eye. This picture of Dr. Helmy was taken while recuperating at Bethesda Naval Hospital.

At the Egyptian military hospital they had been afraid to discuss my injuries with me, but the first day at Bethesda, the doctor checked my eye and told me exactly what had happened and what surgery I needed. He said I would have to have a cornea implant to see again with my remaining eye. He said, "Ibrahim, I'm sorry to tell you that the hospital in Egypt didn't have special sutures for the eye and used thread," so my vision is cloudy now.

I had several surgeries on the remaining leg. After several months they tried a new surgical technique that the Russians had used, making me feel like a lab rat. They put my leg in a big metal circle, with four rods screwed into my leg that were connected to a circle. They inserted about 20 pins that were attached to the ring through the bone. During surgery I could hear something like a pistol that made the pin go through the bone. I still have two of the pins in. After several days they took me to the x-ray department to take pictures of me standing with crutches so that they could adjust the pins, making it loose from one area and tightening it in another.

At Bethesda, they took a lot of x-rays and photos of my finger to plan the surgery to fix it. The surgery took all day to open my finger past my wrist. After lots of physical therapy, I could begin to move it again.

I was readmitted to the hospital in Bethesda over four years. I got to know almost everyone at the hospital and they were some of the best people I've met. I didn't feel I was alone in the U.S., because I also had a lot of friends among people who had been at NAMRU, some who had been there as long as 25 years before. Sometimes these friends would pick me up on the weekend and take me to museums. Suzanne Mubarak visited when she was in Washington with Hosni Mubarak. Even the Egyptian Consul came after Mrs. Mubarak told him about me. The commander of the hospital put a VIP sign on my door after that!

There was an enlisted man on the same ward with me and I would see them taking him for physical therapy. I asked one of the staff about him and she told me he refused to talk to anybody. He had lost both arms in a motorcycle accident and his wife and kids had left him. When we were on the elevator together in our wheelchairs, I started talking to him about myself. I told him how hard it was to believe what had happened to me. I just kept talking to him and told him how I had lost a leg and the other leg was in very bad condition, and had injured my eye and jaw, but that life had to continue. I told him he was lucky to live in the States where he could get the proper prostheses. I told him that if he would like it, I'd come every day and talk to him about my country. From that time on, we started to become friends. Eventually he would come by my room and tell me he was going to physical therapy, and I would tell him to wait a minute and go with him.

I have never been sad about anything that happened to me. I would always say, "I lost an eye, I have another; I lost a hand, I have another, and life must continue."—I wasn't young any longer and I had done everything that I wanted to do—I felt good about that. I also felt that that the accident had to happen and it was "OK." Maybe something else would have happened later if that hadn't. The medical entomologist Harry Hoogstraal always told us that no matter what happened to any of us, like soldiers in a battle, the research would continue.

Close up of front of vehicle after explosion.

Finding a Needle in a Haystack:
An Unexpected Journey Aboard *DSV-3*

By Cmdr. Ken "Bull" Green, Dental Corps, USN

It was late January 1990[1] when I checked in as the Aeromedical Safety Officer (AMSO) to Marine Aircraft Group (MAG)-24, aboard Marine Corps Air Station (MCAS) Kaneohe Bay, Hawaii. I arrived to relieve then Cmdr. Chris "Skydoc" Schuyler. At the time, MAG-24 was a composite air group consisting of three F/A-18 squadrons, three CH-46 squadrons and one CH-53D squadron.

I've just left the job as the AMSO for Training Air Wing 1, Naval Air Station (NAS) Meridian, Miss., where I unfortunately gained a lot of experience with Class A mishap investigations at both the A-4 and T-2 squadrons. After leaving Meridian, I made a short stop in Pensacola for training as a Naval Aviation Water Survival Training Instructor, before heading to paradise.

Immediately after checking into MAG-24, and getting my bearings, but before doing any real standard turnover, Cmdr. Schuyler briefed me on my first assignment which he described as requiring my immediate attention.

About a month prior to my arrival, MAG-24 had a Class A mishap where one of the CH-46s was lost. The aircraft crashed during night carrier qualification practice, in heavy rain. Upon hitting the water, the pilot and co-pilot were ejected in their seats through the canopy bubble, used their Helicopter Emergency Egress Devices [HEEDs] and both were rescued. Also aboard were two crewmen, one was rescued with the aviators, the other crewman was lost at sea.

Cmdr. Schuyler informed me of the "project" he had initially been given but was now turning over to me as he was soon to depart Hawaii. He reminded

Kaieiewaho (Kauai) Channel

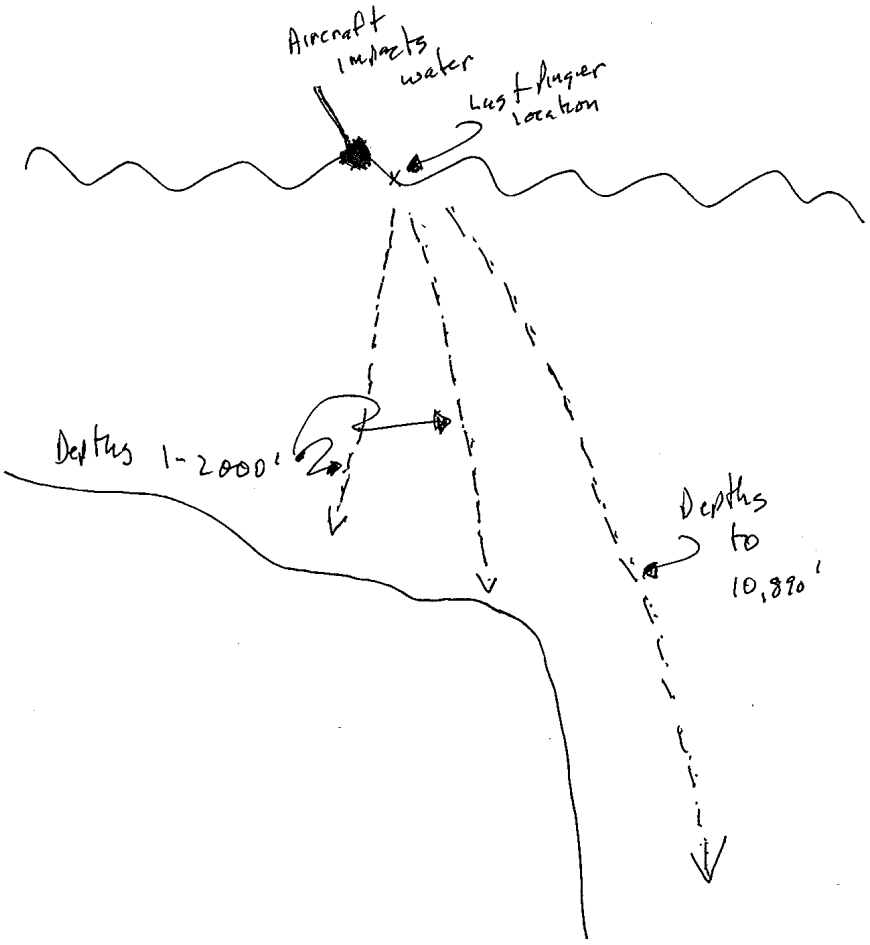


Illustration of surface location of missing aircraft showing the precipitous drop-off.

Courtesy of author

1. The following is true and verifiable; however some individual and squadron names have been omitted. If anyone else associated with this event recalls specifics that I have omitted or mis-stated, I would welcome their comments or corrections.

me that usually, aircraft lost at sea were not salvaged, due to a host of obvious reasons like location, depth of ocean, and cost. Also "usually" the remains of those individuals lost at sea were not recovered or attempted to be recovered because being lost at sea was considered "burial at sea" and an honorable proper naval burial. He then explained that the Commanding General (CG) of the 1st Marine Expeditionary Brigade (MEB), which was the major tenant command aboard MCAS Kaneohe Bay, had requested that efforts be made to locate the crashed helicopter and any possible remains of the lost crewman.

The reason for this extraordinary effort was not made specifically clear to me, however, it was my interpretation of information that the family of the lost crewman had contacted their congressional representative and made the request to find his remains, which in turn made its way to the CG 1st MEB.

Cmdr. Schuyler said I would be taking over the search efforts for this lost CH-46 and lost crewman. He had scheduled a meeting with himself, the CG (a one-star), and me where I would get my formal marching orders. The meeting took place soon after my arrival, and was somewhat intimidating as was my first Marine flag encounter, but it went well. I was told to use whatever resources I could to try and locate the lost aircraft and crewman, and to do this as expeditiously as possible for the family's sake.

The only information that Cmdr. Schuyler could provide me were some underwater maps where the mishap took place, along with the location (latitude/longitude) where the aircraft impacted the water, per the mishap investigation. While Navy/Marine aircraft did not contain any black boxes, there was a pinger which was activated upon salt water immersion, which gave a fairly accurate location of both the impact point with the water, the location where the aircraft sank, and a potential starting point for any search. That pinger was no longer active.

So, now I had my marching orders from the CG, permission from my new boss, the MAG Commanding Officer (CO), to continue this mission, the maps of the area, and the last known location of where the aircraft went down in the ocean prior to sinking.

The aircraft mishap occurred in a channel between the islands of Oahu and Kauai. The Kaieiewaho Channel, also known as Kauai Channel, separates Oahu and Kauai. It is 72.1 miles (116 km) wide and at a maximum depth of 10,890 feet (3,319 m) the deepest of the channels between the main Hawaiian Islands. In one of the last briefings I received from Cmdr. Schuyler, I learned that the search area topography was such that the ocean depth dropped off precipitously to many thousands of feet.

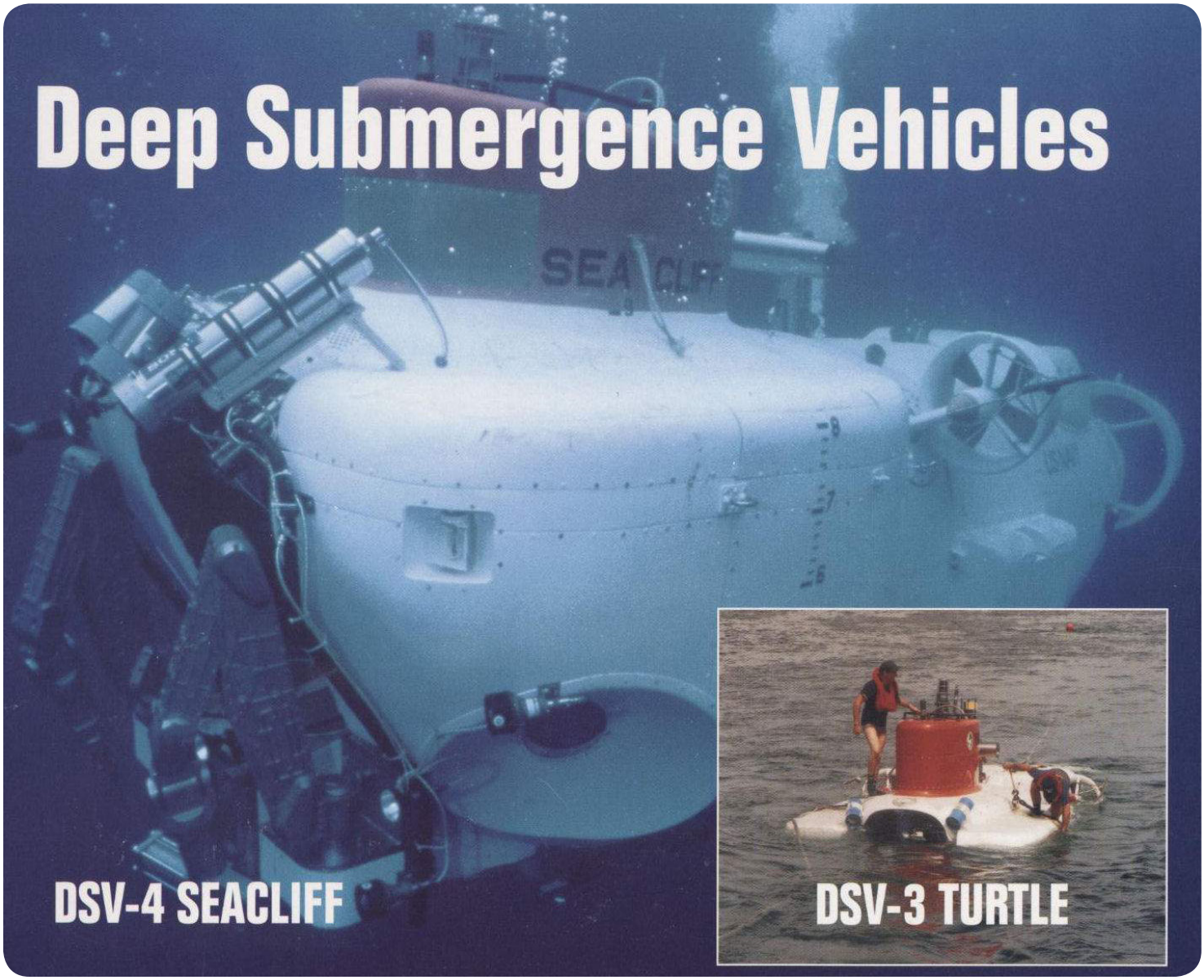
Since we only had the surface location of the mishap site per the aircraft pinger, there was no way to know if the aircraft would have come to rest in relatively shallower waters or descended into the abyss!

In early February, more than a month post-mishap, I began planning my search for this aircraft and remains. While I personally believed that realistically, human remains were most likely non-existent at this point, there might be personal effects which could be recovered if the aircraft was found- helmet, flight suit or any other identifiable personal gear.

I was enthusiastic, but obviously somewhat naïve about how to go about accomplishing this task. My first thought centered on how to locate the submerged lost helicopter, knowing it was likely beyond the depths of any divers. So I pulled out my island directory of military installations and found a number for the operations office of the submarine command at Pearl Harbor. It seemed logical to me to enlist the "silent service" for a mission like this. I innocently told my story of trying to locate this crashed helicopter, ending my description with "…well you guys must have subs patrolling in those waters, and I was hoping you could assist in locating this CH-46 based on the pinger location." The response was along the lines of "Sir, what submarines?" Silent service indeed. I knew this was a dead end. Time for Plan B, which I didn't have yet.

In reviewing the mishap report for this crashed CH-46, I came across another mishap report for another helicopter which was recently lost off the island of Kauai by one of the Navy squadrons located across the island at NAS Barbers Point. I discovered that the squadron had plans to salvage their helicopter, which was in relatively shallow waters (only several hundred feet) off the coast of Kauai. While there were no fatalities in this mishap, apparently the cause of the crash was thought to be mechanical and the mishap investigation board recommended analysis of the aircraft to determine the cause of the crash.

Contacting a fellow lieutenant at the squadron at Barbers Point, I found a more sympathetic ear. I explained my dilemma and asked how they were go-



Booklet cover about the Turtle (DSV-3) & Sea Cliff (DSV-4) & published 31 March 1996.

Courtesy of navsource.org

ing to salvage their aircraft.

I learned that The National Geographic Society was planning a special Pearl Harbor commemorative issue where they would feature information about Japanese mini-submarines which reportedly had infiltrated Pearl Harbor prior to the aerial attack. And reportedly, at least one mini-sub had been lost and remained at the bottom of Pearl Harbor.

National Geographic had contracted use of a Navy deep submersible vehicle to locate this sunken mini-sub, so they could photograph it and include and feature their find in their special commemorative edition. The deep submersible was a three-man *Alvin* class vehicle based in a command located in San Diego. The device was an upgrade from the old "bathyscaphes" of earlier ocean explorations, and its primary mission was rescuing the crew from damaged or sunken U.S. submarines. However, more often they were loaned or rented out for scientific research. They were usually transported and operated from a USNS ship.

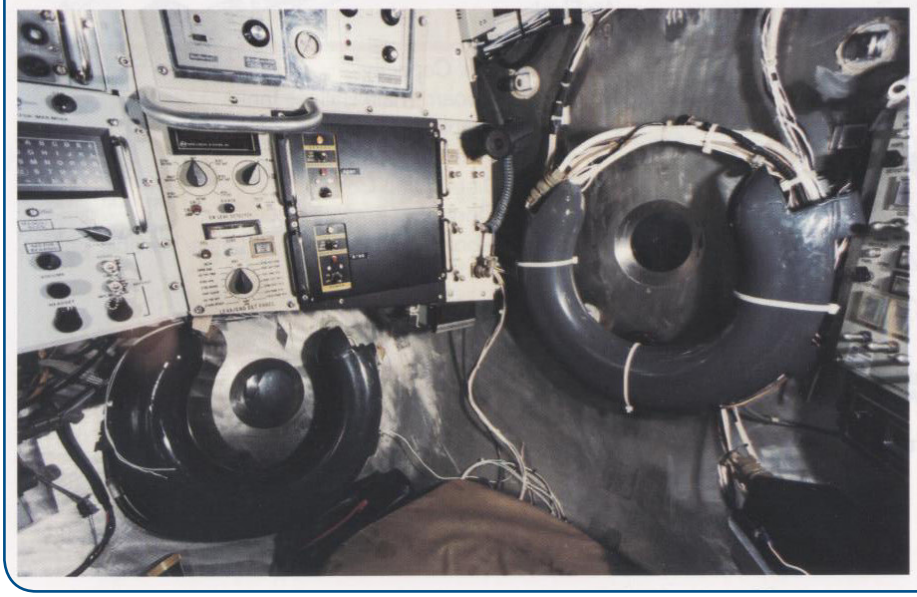
I was informed there were two such deep submersibles, one which could go to medium depths (under 6,000 feet, and one which could go to even deeper depths.

National Geographic had hired use of the lower depth device for a week of searching. The Barbers Point squadron

Summary of Capabilities

Direct Viewing

- **Viewports**
  - **Turtle**
    - Forward
    - Lower Port
    - Lower Starboard
  - **Sea Cliff**
    - Forward
    - Lower Port
    - Lower Starboard



LISTING THE SUMMARY OF DIRECT VIEWING CAPABILITIES OF THE TURTLE (DSV-3)

Courtesy of navsource.org

contact told me the deep submersible crew/non-commissioned ship would be in Hawaii within the next month, but weren't scheduled to begin their Pearl Harbor dives/searches until the week after they arrived. The Barbers Point squadron had arranged to rent use of the deep submersible for a few days in that interim week to look for their downed helicopter. The lieutenant I spoke with suggested I might contact the deep submersible command and see if we could utilize (i.e., rent) their services for the remaining days of that week prior to their National Geographic mission. And he provided me with a contact name and phone number. I now had a Plan B.

I immediately got on the phone to the San Diego command and spoke with the individual who turned out to be the pilot of the deep submersible (also a lieutenant). He confirmed everything I'd heard from the Barbers Point aviator, that they'd be coming to Hawaii the following month, would have a week in port prior to beginning their mini-sub search and would be assisting the Navy squadron for about two days.

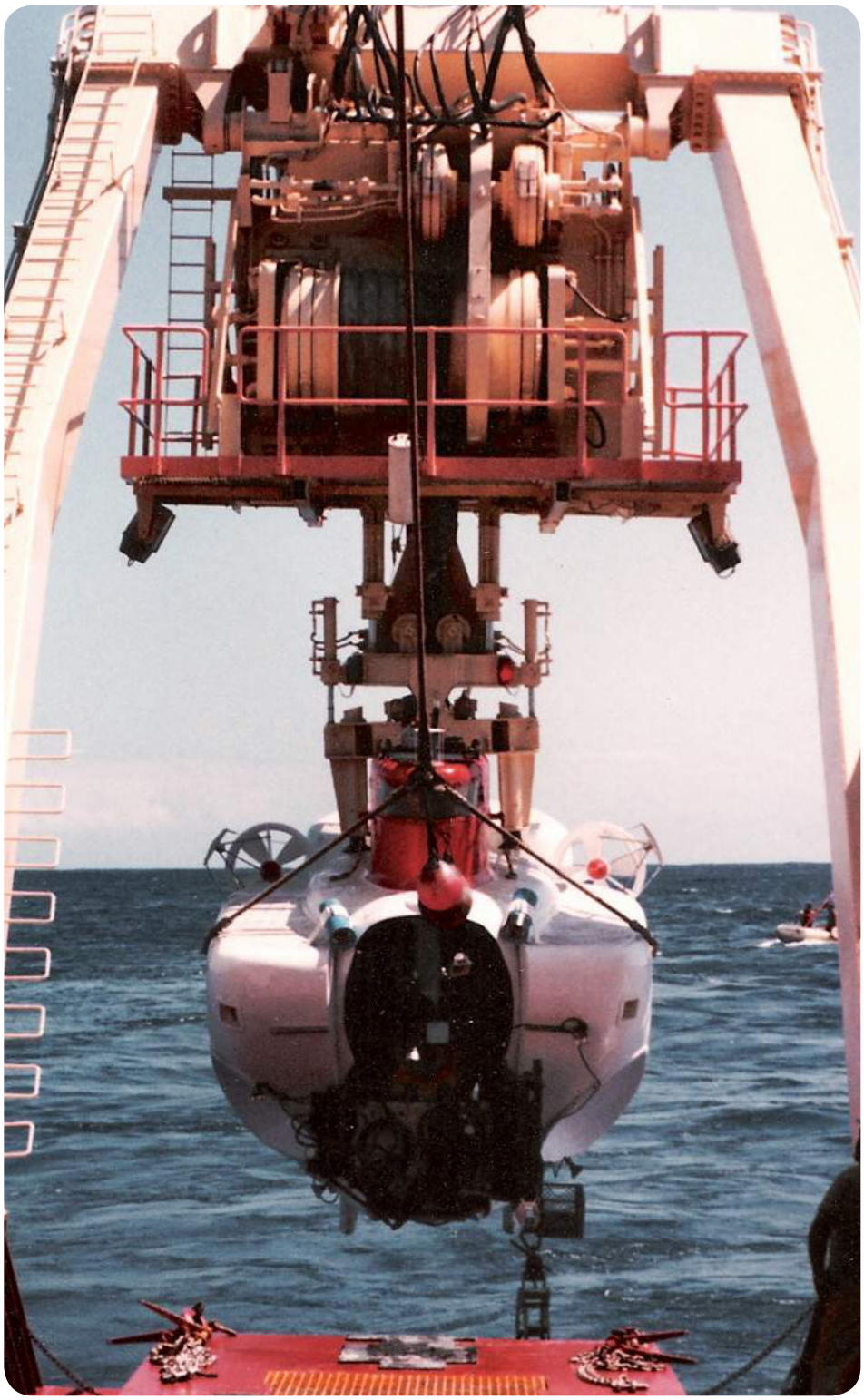
I once again explained my dilemma and search needs, and asked if we could get on their schedule. He got back to me quickly saying that they could offer us up to three days of searching. He explained that due to the sea state they usually did this kind of search dive at night (since at that depth, they'd be relying on their own search light source anyway, and seas would generally be

calmer), and that they'd typically dive for up to six hours. I informed him we had a latitude/longitude of the impact point of the crash and similar location of the last pinger emitted once the aircraft sank. The cost was approximately several thousand dollars per dive.

This was exciting, or at least a reasonable plan to pursue. I immediately scheduled an appointment with the CG to run this by him. In a few days I was once again in the CG's office, briefed him on all that I had learned and discussed the costs of possible rental of the deep submersible. I believe he may have made a call and discussed something with his command sargent major, but it didn't take long before the one-star gave me the go ahead to pursue a search for up to two night's worth of diving.

I headed back to my office to call San Diego. I informed the deep submersible command we were "a go," and he indicated he would be in touch as soon as they were definitely on their way to Pearl Harbor. As February turned into March, and I was still without any contact, I was getting anxious, although I wasn't getting pressured from above. I just felt the longer we go the less chance we would have had of finding anything. Again, naively I was thinking they'll dive straight down from that last pinger location, do a couple of sweeps of that area, and voila, they will find the helicopter.

Finally, in early April, I got the call that the deep submersible would be in Pearl Harbor the following week. The lieutenant I had spoken to said they could support our mission the Monday after the week they arrived, since they would first be helping the Barbers Point squadron. And they would be available through Wednesday of that week (before their Pearl Harbor dive search). I reminded him we could pay for a maximum of two night (dives). He reminded me it was a three-man vehicle, the pilot (himself), an engineer/co-pi-



The DSVSS Laney Chouest, (Deep Submergence Vehicle Support Ship), hoists the Turtle (DSV-3) for a launching into the depths of the Pacific, circa 1988.

Courtesy of navsource.org

lot (another lieutenant who would be there) and an observer. He said that I would be the observer since "you know what this helicopter looks like." Now I personally doubted there would be other CH-46 Marine helicopters found in that area or any other aircraft, and they'd be just as capable of identifying one if they found it, but I was thrilled to have such an opportunity, and so didn't argue.

The next week, they called me, said they were in Pearl Harbor, and they would be going to Kauai with the Barbers Point squadron at the end of the week, and I should meet them the following Monday at the pier at Pearl where the USNS ship would be berthed. We would then go out for two nights of diving (or less if we were successful on the first try). I was reminded to dress warmly for the dives as the vehicle is cold; they would have coffee in thermoses and some sandwiches, but if I wanted to pack any snacks of my own, I was welcome to.

We would be diving in the *Turtle* (DSV-3), a 16-ton, manned deep-ocean research submersible owned by the United States Navy, an *Alvin*-class Deep Submergence Vehicle. At the time, the *Turtle* was designed to dive to 6,000 feet. The *Turtle* had a hull two-inch thick, and a hatch about three and a half inches thick held in place by the pressure of the water above it. The *Alvin*-class DSV's were designed to replace older DSV, such as the less maneuverable *Trieste*-class bathyscaphes.

I eagerly showed up at Pearl Harbor early the following Monday with my mini-sea bag for a two night stay, plus my flight suit with some long underwear as recommended. I brought along all of the sea charts, underwater maps that I had showing the crash location and last pinger signal location. We were underway late in the afternoon, and headed to the crash site. Our plan was to make the first dive the following day. We got to our location, had several meetings to plan the search, and I received a very quick pre-brief about the deep submersible. The DSV *Turtle* is a pressurized device, so there were no worries about oxygen or the bends. It was un-tethered, and operated on its own battery power, propulsion and lights and was outfitted jury rigged with some containers which would accept any remains or personal effects we might find and collect by the remote claw arms outside the device. Having spent my last tour flying often in the TA-4J, I was used to cramped vehicles, so the deep submersible wasn't anxiety provoking. I was a certified master scuba diver but had never been in a submarine, certainly not a deep submersible, and never below 150 feet.

As we hit the water we bobbed a bit, but the sea was calm with light winds that afternoon. Once we were released from the winch we began our descent. The interior of the deep submersible was cramped to say the least. The pilot sat in front facing forward, while the engineer/co-pilot sat behind. Slightly above the pilot, I sat curled up in role as "observer." I could look out the small lower observation port—a window only about five to six inches in diameter.

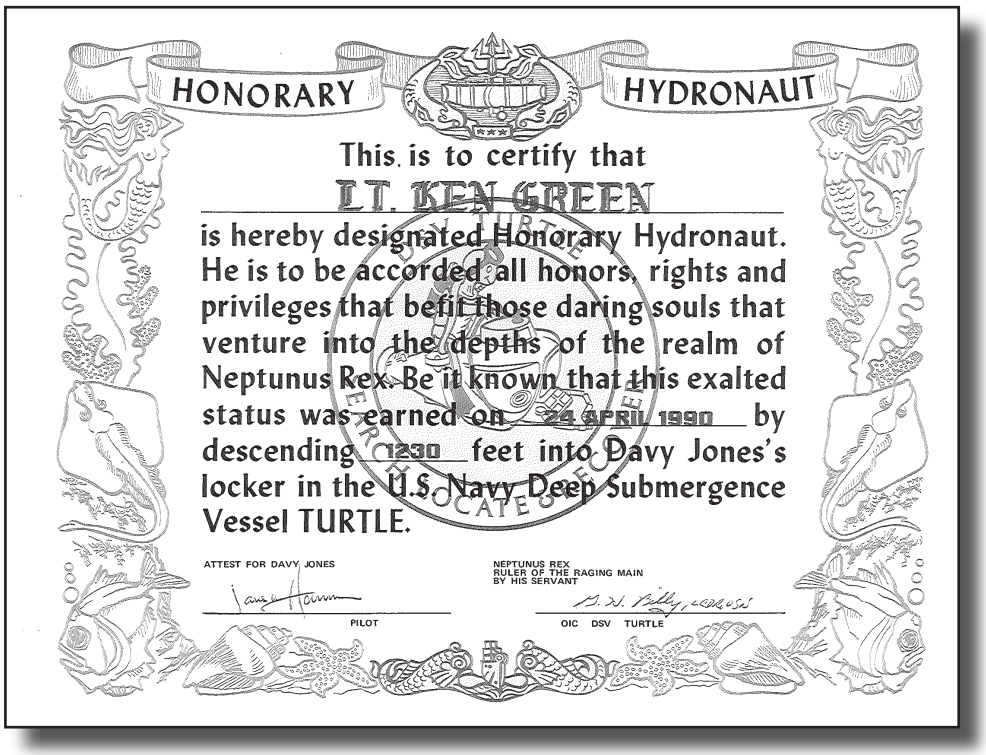
There wasn't much to see on the descent—think of the movie sequence where their deep submersible descends to the *Titanic*. It was very calm and beautiful.

The first thing I noticed was how quickly the late afternoon filtered sunlight disappeared into complete blackness by the time we were below 100 feet or so of depth. We descended to the sea bottom at about 100 feet/minute, hovering just above the bottom after just under 15 minutes and at about 1,200 feet depth. We then began our search.

Per our plan, we had submerged virtually below the last pinger location which was near the actual impact site that the CH-46 made with the water. Our plan was to conduct a simple grid pattern search, back and forth over an area marked on our map. Our time on the bottom was only limited by the battery life of *Turtle*, not the life support system. Progress was slow and steady as we were moving less than the maximum speed of 2.5 knots. Back and forth, just sand, some plankton; with an occasional hovering stop for some coffee and sandwich break, then on with our search.

At one point I finally noticed something besides sand through my viewport—a very large shark. And quite a surprise at that depth. It was a good 10 foot long shark that moved about us without much concern, before swimming off. That was all we would see this night. After a nice smooth 15-minute ascent, we broke the surface after six and half hours, just before midnight. We were connected to the hoist and brought aboard the USNS ship. Once aboard and the hatch was opened, I was last to disembark, and was treated to a bucket of cold water, by my host crew, my initiation for my first dive- and a certificate to go with it.

A nice hot shower, some midrats and coffee, then off to bed. I slept very well,


HONORARY HYDRONAUT

This is to certify that

LT. KEN GREEN

is hereby designated Honorary Hydronaut. He is to be accorded all honors, rights and privileges that befit those daring souls that venture into the depths of the realm of Neptunus Rex. Be it known that this exalted status was earned on 24 APRIL 1990 by descending 1230 feet into Davy Jones's locker in the U.S. Navy Deep Submergence Vessel TURTLE.

ATTEST FOR DAVY JONES

PILOT

NEPTUNUS REX
RULER OF THE RAGING MAIN
BY HIS SERVANT

OIC DSV TURTLE

1,230 foot Deep Club certificate – given to members who dived close to or deeper than 10,000 feet in depth.

Author's Collection

and would be ready for round two the following evening.

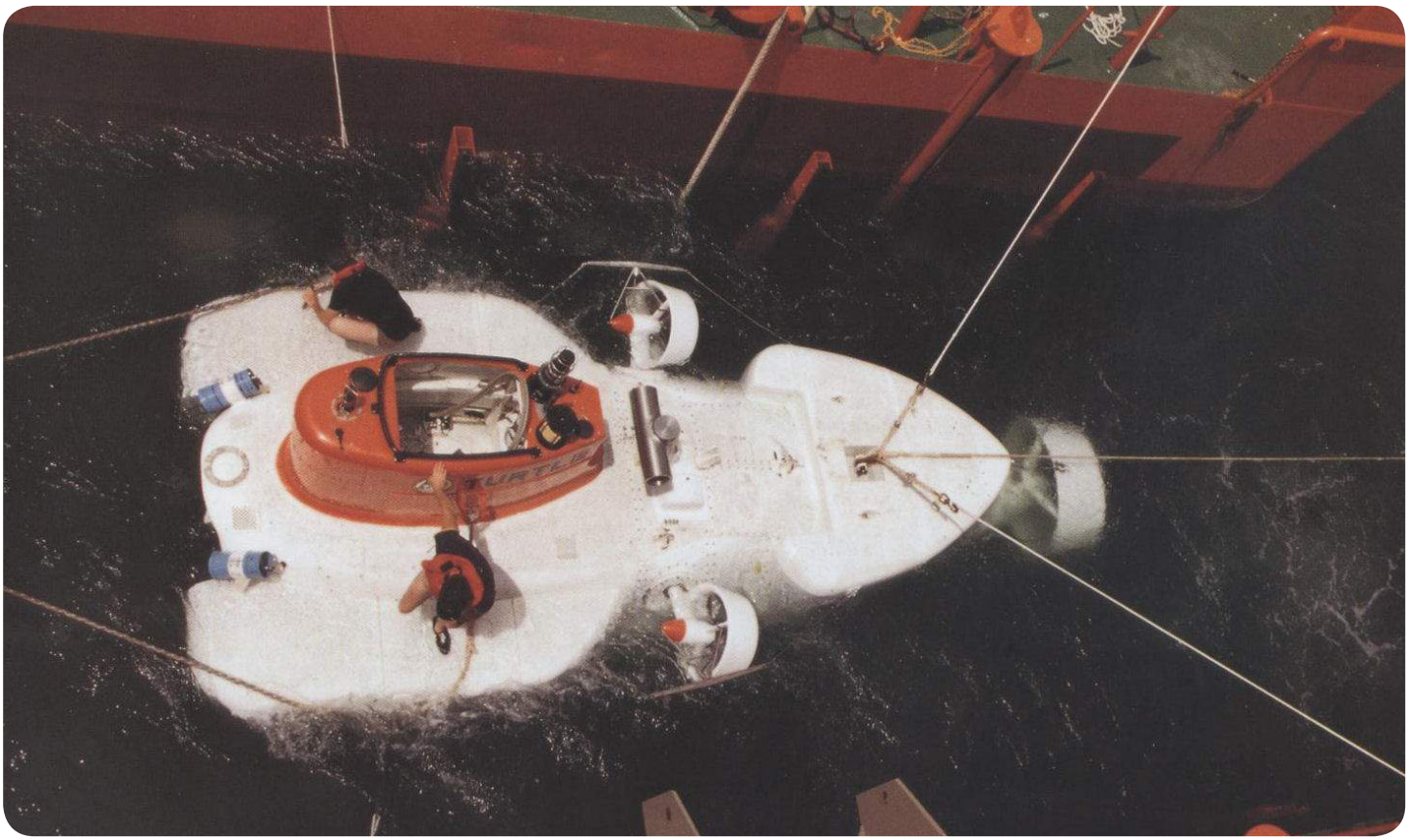
The next day we went over the sea charts of where we had searched, and based on the pinger location of impact point, we made a determination of what would be the next grid area to search. This time we relied on the input of the USNS ship's captain, and the *Turtle*'s crew, regarding the local current patterns to guess which direction the aircraft may have moved once it sunk.

Once again, we saddled up (or sardined in as it were!) and were beneath the waves in short order. On the first night we made it to a depth of 1,250 feet; on dive two we went a bit deeper, almost 2,000 feet. Once again, we experienced the back and forth monotony of sand and more sand during the grid search. There were some mini sea creatures, plankton mostly, but no sharks on this night.

After six more hours of nothing, I thought of high school English class and T.S Elliot, as we "…should have been a pair of ragged claws/ scuttling across the floors of silent seas."

This was our second dive, and I knew we were out of money and permission to make additional dives, so I had to go back to the CG without success, which was an unhappy thought for my first MAG-24 AMSO assignment. The *Turtle*'s pilot indicated we had to begin our ascent soon. I asked for one more sweep of the next grid area. He agreed to 15 more minutes. We then proceeded and, whether it was intuition or pure luck, I suddenly noticed a dark object in my sight line. I could not make out what it was, but it was not a product of nature. I excitedly said something non-nautical like "go this way" then correcting myself to a "hard to port" call, or something to that affect. We tacked in the direction I requested and there in front of my window were, miraculously, side by side, the two CH-46 pilot and co-pilot seats. They were perfectly upright and side by side in the sand. Obviously, as the official observer who was familiar with MAG-24 squadron inventory, they were from a CH-46, and had to be the one we were looking for; they couldn't be from anything else. "Wow, we were close," I thought. This got me a few more minutes of search time, and goose bumps.

At first we circled the seats to see if there were other objects, but nothing else appeared. But there were, for lack of a better term, "skid marks" in the sand leading away or towards those helicopter seats. We followed those marks in the sand and within minutes we struck gold. There in front of us, appeared through the darkness and through the haze of kicked up bottom sand through our search lights, was the CH-46. It was essentially completely intact end to end and upright almost as if it had landed in that spot. The only visible (major) damage appeared to be that it was cracked in half, but not completely split in two. I imagined that it had hit the water and the impact had cracked the fuselage at the top, but it didn't quite split all the way through the bottom, and then sunk that way. As with the seats, we could see a long skid mark where the aircraft had apparently hit the ocean bottom and then slid down an embankment to come to rest at the bottom, some 1,800 feet and change. It was truly a remarkable sight.



Inside back cover photo of the Turtle (DSV-3) being lowered from her support vessel.

Courtesy of navsource.org

As we were minutes away from our ascend, we had time only to make one or two passes around the helicopter. As I suspected, there were no evidence of any human remains or personal flight gear, not a helmet, or glove, nothing we could retrieve. The long safety tether which would have attached the crewman to the aircraft, drifted/floated aimlessly from inside the aircraft hull, but there was nothing attached to it.

We surfaced, with a sense of satisfaction that we had actually located the helicopter wreckage. I personally considered it a triumph. And I felt I could go back to the CG with a successful report.

Returning to MCAS Kaneohe and MAG-24, I scheduled my final brief with the CG, provided my findings, showed a bit of the video the DSV was outfitted to take, and that was that. No follow up to me if the family had been notified of our findings. The odds were against us finding anything.

There were no accolades, and the only "pat on the back" was the one I gave to myself. I did get my deep dive certificate, and a "check in the box" for another fantastic Navy experience. In the end, my journey to the bottom of the sea proved that sometimes, despite the odds, you can find that "needle in a haystack."

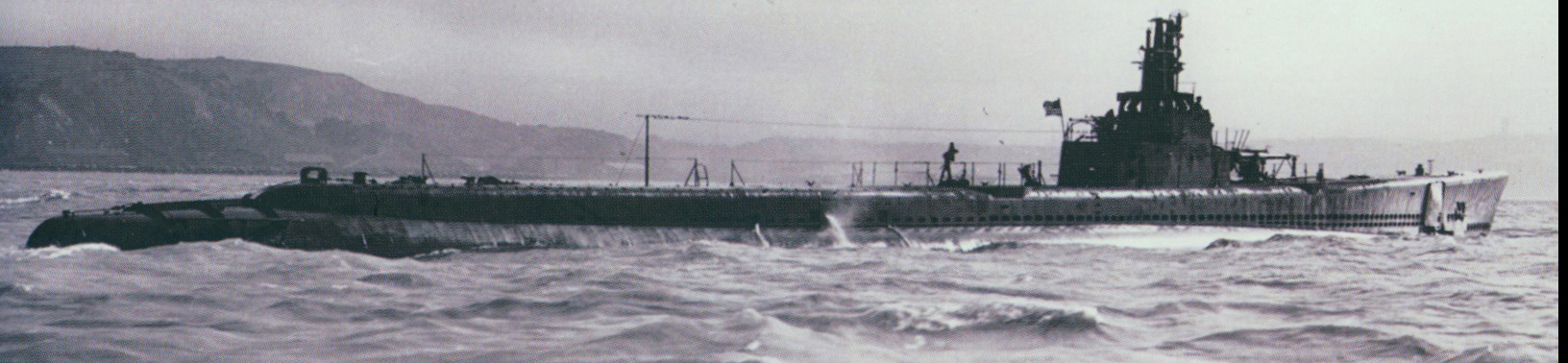
ABOUT THE AUTHOR

Cmdr. Ken Green is the assistant department head of the Faculty Practice at the Naval Postgraduate Dental School at WRNMMC. He has over 30 years of naval service in both the reserve and active Dental Corps, including 10 years working as an Aerospace Physiologist and Aeromedical Safety Officer.

His interests include improving team communication to enhance patient safety, and promoting research in dentistry, neurosciences and human factors.

THE WAR BELOW

The Story of Three Submarines That Battled Japan



JAMES SCOTT

The War Below; The Story of Three Submarines That Battled Japan
By James M. Scott
New York, Simon & Schuster, 2013;
426 pp, including epilogue, notes and index.
ISBN 978-1-4391-7683-2

Anyone with an interest in submarine warfare in World War II should read this compelling account of three U.S. submarines in the Pacific: the USS *Silversides*, USS *Drum*, and USS *Tang*, with a combined total of 27 patrols from November 1941-November 1944. This is a "can't put it down" book.

These subs faced a fiercely determined enemy. Japan was in control, as island after island fell to its grasp. However, it was almost totally dependent on its merchant marine for shipping of essential industry and war materiel, and this became a strategic weakness of great importance. As America recovered from the attack on Pearl Harbor, it rapidly developed a fleet of submarines that numbered 182 boats by the end of the war. These vessels, equipped with four diesel engines that produced 6,400 horsepower and a range of 12,000 miles, were capable of offensive operations, in addition to serving as scouts for the fleet and rescuing downed aviators. They became the ideal weapon for severing Japan's lifeline, and freighters became their frequent targets. The impact was so significant that the post-war U.S. Bombing Survey identified it as "perhaps the most decisive single factor in the collapse of the Japanese economy and the logistics support of the Japanese military and naval power." As the noose tightened, starving Japanese were eating acorns and sawdust. The loss of oil was catastrophic, and rationing halted essentially all civilian traffic. Some essential vehicles and military trucks were fueled by charcoal.

The submarine force was manned by crews who performed a most dangerous mission. One in five subs was sunk. Submariners were six times more likely to die than their surface Navy compatriots, and 3,505 of the estimated 16,000 Sailors and officers who served at sea were killed in action. Their contributions come to life in the hands of an author whose book is a definitive account, thoroughly researched (including a hundred interviews) and well written. The scenes are vivid and have the believability of a writer who is comfortable with his subject and able to depict it from all angles, top to bottom—you can almost smell the diesel fuel. Scott peppers this with vignettes that bring to life an austere existence in tight quarters. Storage space was limited, and powdered milk and eggs were staples. Cooks would scattered a few carefully preserved eggshells on the galley counter to fool the crew into thinking the eggs were fresh. There was an exceptionally determined skipper who had a steel bunk welded on the bridge so he would be immediately available for any event. A constant hazard was the sub itself where sailors could be crushed between torpedoes that weighed a ton and a half. This was in addition to the torpedoes being erratic and a threat to the submarines due to the scandalous lack of an anti-circular run device. There were countless displays of courage under fire, epitomized by the commanding officer of the *Tang*, Commander Richard O'Kane, who in nine months would sink 24 ships, a record not equaled in the war. He would be honored with the Medal of Honor, three Navy Crosses, three Silver Stars, the Legion of Merit, and the Purple Heart.

For readers of *The Grog*, Navy Medicine comes on board with an emergency appendectomy performed by the *Silversides*' pharmacist's mate. Done underway at a depth of 100 feet, the patient came out of anesthesia as the sub was under attack. And there is Dr. Joel Boone, holder of the Medal of Honor and a future vice admiral, who went ashore after Hiroshima as part of an urgent mission to liberate Americans held at prison camps in the Tokyo area, especially the infamous Omori camp.

A gentle hint is in order for the reader to keep a mental GPS handy as chapters hop and skip between the subs. This can be disorienting, especially if the book is read over multiple sittings. Its effect is magnified in the last 68 pages of text when the *Tang* is sunk by a defective torpedo that circled back and crashed into the sub. The nine survivors of the crew of 87 were taken prisoner by the Japanese and would be subjected to dreadful deprivation and cruelty. At this point the reader is no longer at sea. But that is a timing chain issue for reviewers to worry about. It does not, however, negate the great value of this account of magnificent sailors who fought "the war below" with courage, skill, and heroism. James Scott has served their memory well.

~Review by Col. (ret.) Richard Ginn, MSC, USA

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Bureau of Medicine and Surgery